UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION
CLEVELAND, OHIO

IN RE:	CASE NO. 1:17-md-2804
NATIONAL PRESCRIPTION OPIATE LITIGATION	**VOLUME 2**
TRACK THREE CASES	*(Pages 226 - 509)*
1:18-op-45032	
1:18-op-45079	WEDNESDAY, MAY 11, 2022

TRANSCRIPT OF PHASE II ABATEMENT BENCH TRIAL PROCEEDINGS

HELD BEFORE THE HONORABLE DAN AARON POLSTER

SENIOR UNITED STATES DISTRICT JUDGE

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Northern District of Ohio
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- - -

TABLE OF CONTENTS

WEDNESDAY, MAY 11, 2022

- - -

(Court resumed at 8:32 a.m.)

- - -

08:32:24 THE COURT: Good morning, everyone.

COUNSEL EN MASSE: Good morning, Judge.

THE COURT: You can be seated.

And I guess before we start, did you work out something on the pages of the expert reports?

08:32:38 MR. HALL: Your Honor, Jeff Hall for Walgreens.

We took a look at the material Mr. Lanier identified. We do not object to the admission of table two, table three, figure 12, and figure 13 from P-23116, Dr. Keyes' April 21st

08:33:02 report. Those were on the pages that plaintiff identified at the end of the day of her report.

THE COURT: Okay.

MR. HALL: We do object to her rebuttal report and the text on those pages for hearsay and other grounds,

08:33:15 including to the extent they contain --

THE COURT: Let me see the document, please.

MR. HALL: Sure. Handing up her rebuttal report and her original report.

THE COURT: All right. Look, I'll take this

08:33:43 up at some other time. You can brief it or whatever. I

don't -- I mean, everything is -- I mean, essentially, I'm considering everything.

MR. HALL: May I make one brief point, Your Honor?

08:33:54 THE COURT: Very briefly. You want to submit briefs, I mean, I'll deal with all this stuff at the end. I'm obviously considering everything, so you want to brief, send me briefs on what you want do with expert reports. I'm considering everything.

08:34:09 MR. LANIER: We will brief appropriately, Your Honor. Thank you.

THE COURT: I'm not going to waste time on all this stuff.

MR. HALL: Thank you.

08:34:14 THE COURT: Candidly.

It's essentially -- I'm considering everything. Whether it's formally admitted or not, it really doesn't matter. I'm considering the -- what the experts say, what the -- you know, look, I've read their reports. So what's

08:34:32 technically admitted, I'm not sure it makes any difference.

Could someone tell me why -- whether it really makes a difference?

MR. HALL: It might make a difference on appeal, Your Honor, but we can submit a short brief.

08:34:45 THE COURT: You're worried about appeal, trust

me, it isn't going to make a difference on appeal. The Court is going to look at what I did and is there a basis for it. If they think what I did is sound, they'll affirm it. If they don't think it's sound, they won't.

08:35:00 MR. HALL: Understood. Just for clarity of the record is what I meant, Your Honor.

THE COURT: All right. You can put it in your posttrial briefs, candidly. I don't want to waste time on this stuff.

08:35:11 MR. HALL: Yes, sir.

THE COURT: Let's move on with the witness, please.

MR. WEINBERGER: Your Honor, the plaintiffs call Dr. Nancy Young.

08:35:47 THE COURT: Ma'am, if you could raise your right hand, please.

(NANCY YOUNG, sworn)

THE COURT: Thank you.

MR. WEINBERGER: May I proceed, Your Honor?

08:36:12 THE COURT: Yes.

DIRECT EXAMINATION OF NANCY YOUNG

BY MR. WEINBERGER:

Q Dr. Young, please state your full name.

A Nancy Katherine Young.

08:36:18 **Q** Dr. Young, what is your profession?

A I'm a social worker.

Q And you are connected with a organization by the name of Children and Family Futures, correct?

A Yes, I am.

08:36:29 **Q** And describe to the Court what that is, please.

A It's a policy nonprofit firm. We do consulting work on all about children of parents with substance use and mental health problems.

Q And what is -- what is your relationship to that firm?

08:36:46 **A** I'm the executive director and the cofounder.

Q Who is the other founder?

A My husband, Sid Gardner, who has expertise in collaborative practice, children's policy.

Q Okay.

08:37:03 MR. WEINBERGER: Mr. Pitts, do we have the Wolfe on?

BY MR. WEINBERGER:

Q So, Dr. Young, this is a roadmap of what we are going to talk about with you today. Let's see if we can get

08:37:26 this -- there we go.

So we're going to talk about your background. We're going to talk about this organization, Children and Family Futures. We are going to go through your opinions. And we're going to talk about the needs of the two counties,

08:37:40 Lake and Trumbull.

Fair enough?

A Yes. Thank you.

Q Okay. Now, with your assistance, have we prepared a set of slides to go through your testimony today?

08:37:54 **A** Yes, we have.

Q Okay. And those slides, we've marked them as CT32 Demo 2, and we've given the Court a copy of the slides.

So this -- this is our first slide. And it describes you as executive director of Children and Family Futures,

08:38:38 correct?

A Yes. That's correct.

Q All right. Let's talk a little bit about your background.

Would you go through your background, please, to --

08:38:49 that provided you the experience and education to do what you do today in your profession.

A So my education, sociology as an undergrad. Master's of social work degree, which I concentrated in social policy. And then a PhD in social work also in macro

08:39:11 practice or social policy.

Q Okay. And then we have your employment as cofounder and executive director of Children and Family Futures, correct?

A That's correct. We just had our 25th anniversary, so

08:39:25 been doing this for a while. And I'm coming up on 30 years

post PhD.

Q Okay. So let's talk now, have you describe to the Court your background, please.

A So my work has always focused on children of parents with substance use problems. And during my doctoral dissertation, I evaluated a Los Angeles Unified School District early intervention program for children who had prenatal exposure. And it was really the first place in the country that tried to intervene with young children to see if they could help with some of the problems that they were seeing as kids were getting into elementary school. So I followed the kids into elementary school and evaluated, as it says, their social competence, their behavior, and academic performance.

The NIDA, National Institute on Drug Abuse, predoctoral fellowship was a bit unique because typically NIDA funds universities and students can apply through the university for support, but this was a proposal that I put in directly to National Institute on Drug Abuse, and they funded the last two years of my dissertation through a fellowship. So it was an award versus going through the university for support.

Q So let's now talk, have you describe to the Judge, the focus of your career.

A So always looking at this context of children who are

affected by their parents' substance use problem and what that means for our health and social services as a result of kids who have challenges and their parents who have challenges.

08:41:17 So throughout history, we've had these issues that policy has addressed in various ways. So I've looked at those economic and political influences and the social factors that were affecting the different eras of drug use in our country and their effects on children.

08:41:39 So as I mentioned, I'm coming up on 30 years, and the focus throughout my career has been primarily on children who are also in the child welfare system, who have allegations of child abuse and neglect. How do you prevent removal? How do you, importantly, bring together those

08:42:02 health, social service, education systems to provide the services that are needed for children and their parents to prevent their own substance use problem and to -- and to prevent their mental health issues that may develop.

And so, importantly, we collect a lot of information

08:42:21 from communities around the country about what they're trying to do to solve this problem and, important, what works.

Q Now, briefly, would you tell the Court what this slide represents in terms of honors and awards that you've

08:42:41 received.

A Right. So the Administration on Children and Families, the Outstanding Contractor for 21 years, we've held a contract to implement the National Center on Substance Abuse and Child Welfare. And by "we" I mean Children and Family Futures.

NASADAD, the National Association of State Alcohol and Drug Abuse Directors, have awarded me a couple times for awards for service and for women's treatment.

And then this special recognition by the National Association For Children of Alcoholics and, more recently, the Child Welfare League of America, at their 100-year anniversary honored a hundred champions across the country. And I'm very honored to have received that.

Q So this slide describes some of your selected affiliations and activities. Would you briefly go through this.

A Sure. These are just a few recent kinds of things that we have done. With the ABA Center on Children and the Law, I presented with a woman who works at the Office of Civil Rights. We did a lengthy project on the civil rights protections for persons with opioid use disorders to receive medication-assisted treatment when they're part of the child welfare and court systems.

The Office of the Assistant Secretary For Health, as she was doing recommendations related to the difference

between diagnostic codes on neonatal abstinence syndrome and neonatal opioid withdrawal syndrome, so I was part of the expert committee with that.

Several times that I've testified at Congress. You see the various ones. I think important in 2016, Senator Brown and Senator Portman asked me to come here to Cleveland to testify about the impact of the opioid epidemic in Ohio.

And then, several other times that I've testified at Congress.

08:44:55 A few of the major publications, the consensus group with SAMHSA, over 40 national leaders that we brought together to put out a monograph from the Substance Abuse and Mental Health Services Administration on treatment for pregnant women with opioid use disorders.

08:45:16 The Quality Improvement Center For Community Collaborative Court Teams, Ohio was one of the sites that we selected to participate. This was a specific initiative that brought the court as the leader into this collaborative practice to ensure that infants who were identified with 08:45:39 prenatal substance exposure had safety plans before they went home. And Trumbull County was one of the implementation sites for what we referred to as this QIC, Quality Improvement Center.

And then, very honored to have had the opportunity to 08:45:58 work with the National Association of Drug Court

Professionals. A few years ago we published Family Treatment Court Best Practice Standards, so these are courts that operate in the civil docket of child abuse and neglect that put together family treatment courts, similar to adult drug courts but lots of differences because there's not a criminal charge.

Q So we have a slide now on current policy initiatives. Tell us what this slide depicts.

A The re -- both reauthorization for the Child Abuse Prevention and Treatment Act and Promoting Safe and Stable Families is due to happen during this federal fiscal year, and I am consulting with the Health, Education, Labor and Pensions, which is a Senate committee, on changes that should be made in the CAPTA bill, based on our experience of working with so many sites around the country about how they're implementing that very specific plan of safe care for infants and their families.

And then the Senate Finance Committee, again, they oversee Promoting Safe and Stable Families, which is everything after the initial charges of child abuse and neglect.

Q What is the CAPTA Act?

A Child Abuse Prevention and Treatment Act over -- is the entire front end of the child welfare system. So from the hotline, someone calls, says I have a concern about this

child, and hotlines operate across the country to take those calls. Child welfare agencies' staff make a determination of the immediacy of when they need to do an investigation if an investigation is warranted, and then file the petitions with the Court should they determine that this child needs to be removed, and determine if those allegations of abuse or neglect are substantiated.

08:47:50

In 2016, in reaction to infants and the increasing number of infants that were going into the child welfare system, primarily related to infants that were experiencing neonatal abstinence syndrome, Congress changed the law and reinstituted, if you will, this requirement that there be a plan for the child's care and that it address the treatment needs of the birth parents. And they removed in the statute that this was only related to illicit drugs, because they recognized that infants could go through withdrawal from drugs that were legal.

08:48:11

08:48:36

So big change that happened in our national policy about infants with neonatal abstinence syndrome and exposure to -- primarily it was opioids that was driving this during 2016.

08:48:54

Q Okay. So we've talked about your background, and now I want to talk about Children and Family Futures for a moment.

And we have a slide here that is entitled: Ongoing

08:49:08

and Recent Technical Assistance Programs at CFF.

Describe for us what this slide depicts, please.

A So I mentioned the National Center on Substance Abuse and Child Welfare. We've been the contractor since Congress put an allocation in to say we needed a place in the country that developed knowledge and provided technical assistance to communities about this population of children in the child welfare system whose parents had a substance use problem. We just were awarded our fifth rebid, so we're in our 21st year of operating that contract for the federal government.

As part of that contract over years, they've added additional programs. The Regional Partnership Grant Program, there have been 110 in the country, several in Ohio, one in Trumbull County. These are competitive grants that communities bid for to help them understand how to bring these complex systems together on behalf of families.

Again, after the 2016 legislative change about infants with prenatal exposure, the administration shifted our focus for this program of in-depth technical assistance. Over half of the states have participated with us in about a two-year technical assistance planning, strategic planning process to improve their services and focus on their outcomes.

We've also been the contractor to the Department of

Justice through the Office of Juvenile Justice and Delinquency Prevention.

I mentioned the family treatment court standards. We provide technical assistance to all of OJJDP's grantees that have family treatment courts.

Prevention and Family Recovery, similar. It was funded, however, by a foundation and really focused on keeping infants and young children with their parents whenever possible by providing services.

I mentioned the Quality Improvement Center. We have a program area that's specific to children of veterans and recognizing the mental health needs that they have, particularly when their parent comes back after deployment and may develop a substance use problem.

And then the START, Sobriety Treatment and Recovery Team, we're the national home for that initiative. It actually started here in Cleveland. It's been operating in Cleveland since the mid-1990s and now is implemented in many sites around the country. It's on the federal government's clearinghouse of evidence-based programs. And Governor DeWine has been a very strong supporter of the START program in Ohio. And all of those that are asterisks are places -- are initiatives that have operated in Ohio.

So I've been to Ohio a lot related to these technical assistance projects, in particular related to the family

treatment courts. But we have staff -- we have a staff member who lives here in Cleveland, and we have staff who talk to the communities in Ohio every week.

Q So with respect to the opioid epidemic, is it fair to say, Dr. Young, that you and your organization at CFF have been involved in assisting communities vis-a-vis the effect on families, the effect on individuals as well as families, including children?

A Yes, we have.

We've watched since, you know, the early 1990s various ways that children have been affected, but in around 2010 or so our contract through the National Center on Substance Use and Child Welfare, our project officer called and said that she had had a briefing through SAMHSA about the opioid epidemic, and she needed me and our staff to get up to speed on opioids and to be ready, because this was going to be something that we would have a lot of initiatives around and needed a lot of expertise for.

Q Dr. Young, have you been retained as an expert not only in Lake and Trumbull County cases but in cases around the country by communities and attorney generals?

A Yes, I have.

Q And have you testified in court proceedings, giving testimony similar to what you intend to give today?

A Yes, I have.

Q Where has that been?

A In Huntington, in the trial for Huntington and Cabell County, and also for the STATE of Washington.

Q And have you been qualified as an expert in this -- in your field in those cases?

A Yes, I have.

Q Okay. Now, you have in front of you a copy of your April 16, 2021 expert report, which we've marked, Your Honor, as P-23128.

Correct?

A Yes, I do.

Q And we have a copy of your -- some of the -- or the appendices to your report, which includes your curriculum vitae, which is marked as P-23129, correct?

A Yes. That's correct.

Q And after you gave a deposition in this case, you submitted a short addendum to your report to correct a couple of citations. And that's marked as P-27576, correct?

A Yes. That's correct.

Q Okay. Now, does your report, and the addendum, accurately reflect your opinions in this case and the bases for the opinions?

A Yes, it does.

Q All right. So let's talk about the scope of your report.

Would you describe that to the Court, please.

A Yes. Really three questions: Has there been an effect of the opioid epidemic on children and families in Lake and Trumbull Counties?

08:55:54 Has it affected child welfare services in those two counties?

And what are the evidence-based interventions that could be implemented to address the effect of the opioid epidemic on children and their families in the communities?

08:56:10 **Q** Okay. So what are, at a high level — and we'll go into the details — but what are your answers to those three questions?

A Yes to all three of them. Yes, there has been a profound effect on pregnant women and their infants, their

08:56:28 children, really multigeneration effects within families, grandparents, others that are stepping in to care for these children.

In the child welfare system in particular, we saw an increase in the number of children, I mentioned infants in

08:56:46 particular, that were being placed in protective custody as a result of their parents' opioid use disorders.

And over these 25, 30 years of really monitoring and understanding what works, there are programs that are effective and a way to put those programs in place that help

08:57:08 families to recover.

Q With respect to the opinions that you hold in this case, would you make -- would you ensure for us that the opinions that you are rendering are to a reasonable degree of certainty?

08:57:27 **A** Yes.

Q You agree that you will keep your opinions within those standards?

A Yes.

Q Very good.

08:57:34 Now, let's talk about some of the methodology that you used and the sources that you utilized in applying the methodology to your ultimate opinions in this case.

Okay. This -- what does this slide describe?

A They're various administrative datasets that are

08:57:59 collected from child welfare submitted through the state to the federal government. The federal government cleans the data, makes it anonymous, and then makes it available to researchers.

I'll just take a minute, the reason why it says small

08:58:17 counties as a subset, those data are not available to anyone through the data archive if that particular county has less than a thousand children per year who are placed in protective custody.

So as we looked at these datasets for the small

08:58:37 counties, we made a determination that we needed to group

the small counties together. We couldn't identify which county was Lake and Trumbull. Only the large counties have identification. So there are five large counties in Ohio that are identified in these datasets, and the rest are grouped together as small counties. That's what this "small counties" means. So it's a subset of NCANDS.

I described that front end of the system where there are allegations of abuse or neglect. There's a determination made by the Court on if those allegations are substantiated. And all of that part of the system, investigations, reports, sit in this National Child Abuse and Neglect Data System, or NCANDS, so that's the front end of the system.

The AFCARS part of the system is if that child is placed in protective custody and there is a court order to oversee that case, then that data sits in AFCARS, which is about the foster care and adoption system of the country.

TEDS, or treatment admissions that are collected by providers, again, rolled up providers of substance abuse services and then rolled up to the states, submitted to the federal government.

There are some special studies that have been done by the Department of Health and Human Services. As you see, the Assistant Secretary For Planning and Evaluation and CDC, as well as data that we used from the Department of

Education, and various other places in the research literature that they've been looking particularly at infants with prenatal exposure, infants who experience neonatal abstinence syndrome, that have been published by the American Academy of Pediatrics in particular.

09:00:33

Q Okay. Did you also obtain information from Lake and Trumbull County specifically?

A Yes, I did, both from reading the depositions of key staff in the two counties as well as having the opportunity to have interviews, conversations with the executive director of the Lake County Department of Job & Family Services, which ODJFS it's called here in Ohio, which oversees both income support and child welfare services, and Rick, whose name I won't try and pronounce the last name, although I've known him for many years because of Trumbull County's participation in the Regional Partnership Grant Program. And he was also really instrumental in that QIC, the Quality Improvement Center, related to infants. So I had conversations with both of them.

09:00:53

09:01:17

09:01:37

Q So a couple times in your testimony so far you've talked about CFF's involvement in grants that have been issued to assist -- to have you assist communities.

Do you understand that we are here today in the phase II of this trial to determine the -- what is the appropriate abatement remedy to abate the epidemic in this case? Do you

09:02:04

understand that?

A Yes, I do understand that.

Q And so, in terms of your background and expertise, while a lot of it is grant related, you also can provide expertise as to what is needed in these counties, correct?

A Well, in fact, the reason that the federal government provides grants is to test strategies and to learn, to develop knowledge. So it is this entire body of work over 25 years that have been funded by the federal government or by specific agencies that have evaluations as a component of that so that we can learn what do you do about resolving these problems.

Q So you have identified five different populations affected by the opioid epidemic who basically need help to remedy the harm that's associated with the epidemic, correct?

A Yes. That's correct. Kind of --

Q So slide 13, would you describe that for us, please.

A Yeah. Yes. Taking a developmental perspective, which is I think social work practice always is, you know, what -- at what stage is the child in their development, because things are very different obviously for infants than for adolescents.

So taking these five populations, from pregnant women, the immediate effects for infants if they experience

withdrawal, the children who are affected by prenatal opioid exposure, which is a larger population of children that have opioid exposure but perhaps didn't manifest those immediate withdrawal symptoms within the first 24 or 48 hours of life, but they were exposed and may have long-term effects.

And then, this population we would refer to as, you know, sort of postnatal environment. So growing up with a parent who has a opioid use disorder and the sometimes trauma that children experience. We've certainly all seen that in our media about what's happened to too many children that have experienced that situation of having a parent with an opioid use disorder.

And then, that population of children who may be both of those populations of both prenatal exposure, living in a family with opioid use disorder, and are at high risk of developing their own substance use problem as they enter adolescence and young adulthood.

Q So we're going to look at each of these populations and your recommendations, correct?

A Yes, we are.

Q Okay. So starting with pregnant women with OUD and its effects.

What does this slide represent? This is slide 14.

A This is a study that is regularly collected from the CDC about experiences for pregnant women. And they reported

in 2019 that pregnant women reported using prescription opioids during pregnancy, 6.6 percent of them in the nation.

And then, if we apply that to the number of births in Ohio and Lake County, we see the number in one year of infants who would have been exposed to prescription opioids in the uterine environment.

Q And the slide goes on to talk about the risks of OUD during and after pregnancy?

A Yes. That's correct.

09:05:57 **Q** Okay. Describe that for us, please.

A So while the exposure may not generate immediate withdrawal, we do know that all of the children with exposure need to be monitored and assessed for developmental outcomes to see if there are interventions that are required during that early childhood period, because that is really the sweet spot of intervention for children who have been exposed to substances and opioids during pregnancy.

So if we only looked at those that, again, manifested immediate withdrawal, we'd be missing a large population of children who need to have that assessment to look at their developmental outcomes in infancy, toddlerhood, the preschool period in order to get them ready for kindergarten. The school readiness component for this population is critical.

And then we also know that for women, newer data that

has been coming out about the high risk of overdose death, so if they were in treatment or they had a period of abstinence, that if they use again in this critical period that came from this particular study, from seven to 12 months. So it means that we can't just say, aha, she's delivered the baby, everything's fine. We need to make sure that she is engaged in services, that she has the supports that are needed to prevent overdose death in this maternal population.

09:07:48 THE COURT: Doctor, could I ask you one question?

6.6 percent of women reported using prescription opioids during pregnancy. Are those prescribed prescriptions or diverted or, you know, stolen, whatever? 09:08:06 Are doctors actually prescribing those?

THE WITNESS: They are both prescribed, if -- we do know that the Medicaid population is prescribed prescription opioids during pregnancy at substantially higher rates than women with private insurance. But they 09:08:27 are both prescribed as well as the other populations that you mention that may be diverted.

THE COURT: Okay. Thank you.

THE WITNESS: And this particular data does not follow up with that important question, so we don't know 09:08:41 to what extent that -- which population that is.

THE COURT: Thank you.

BY MR. WEINBERGER:

Q So slide 15 is a graph.

Would you tell us what this graph represents, please.

09:08:54 **A** We mentioned the TEDS dataset, treatment episodes dataset. These are data from Ohio monitoring the women that were admitted to treatment that identify their substance that they're using when they're admitted to treatment. And you see in the mid 2000s was pretty consistent data, and

09:09:18 then, really, an escalation of both opioid and synthetics, and then shifting to heroin as the substance that they were using.

Again, this is the subpopulation of women who are pregnant, so really important that we're making sure that

09:09:38 she and the infant during pregnancy are stable and that they are provided services.

Q So do you know, Dr. Young, does this track -- this graph, for example, with respect to other opioids, opiate synthetics, which is the orange line, does this track the

09:09:59 general population trends with respect to use of opioids during this time frame?

A It does track along that same time of for the public systems. And I mentioned when the federal contract officer said to us, you need to really understand opioids and to

09:10:23 understand what communities can do to prevent children from

being placed in out-of-home care. That was in that same time period, 2010, 2011, which I understand to be, you know, kind of that transition to -- to sometimes illegal use. So it tracks very much with what was going on in our communities.

Q So what are some of the interventions that are required for pregnant women with opioid use disorder?

A Well, certainly, before women become pregnant, knowledge of the risk of using opioids during pregnancy, specialized programming during pregnancy so that medication-assisted treatment, which is the recommended treatment by the obstetrics and gynecologists in the country, as well as the American Society of Addiction Medicine. So specialized medication-assisted treatment program that really focuses on, again, the stability for the women, stability for the developing fetus, making sure that the other kinds of conditions that she may need in order to access to treatment are available, making sure that discontinuation of treatment doesn't happen, because we want to provide, again, a stable environment during pregnancy for the infant. And those other services that, again, that she may need.

I mentioned the Child Abuse Prevention and Treatment Act which requires that either before or before the -- before birth or before the infant goes home, that there's a

plan of safe care put in place.

So this is what changed in 2016 by Congress, that said we have to ensure that these babies and their mother and their family have a plan about how this baby is going to be safe.

09:12:30

Unfortunately, too many babies were going home without that, and there were documented infant deaths because that had been missed during both the prenatal period at birth, so plan of safe care.

09:12:48

So that put a burden on health care providers that, you know, hospitals now must assure -- the governor must assure that they have a plan that hospitals and that they're implementing policies that hospitals identify and ensure that there is a plan for this infant to go home.

09:13:06

And then, postpartum, I've mentioned already this high risk of overdose death in the postpartum period that needs to ensure that the family is engaged in services.

Q So this next slide, slide 17, is from your report.

What does this depict?

09:13:30

A Well, early on, we recognized that communities might say, yes, we have to do something about this population of infants. And we tried to categorize, if you will, how this developmental phase and what kinds of services need to be put in place at these very critical points of intervention.

09:13:55

So we've mentioned prepregnancy, at -- during prenatal

care, at the time of birth. And then it's not okay to just say, okay, there is a plan in place, we can walk away, because infants are at risk of poor developmental outcomes, and we have to make sure that they have safety in where they're going home, where they're living.

09:14:15

This was -- has been reproduced many, many times across the country. Many people have told me that this has been very helpful to them, to help them organize the way that they put interventions in place and sort of parcelize the task of what do we need to do.

09:14:33

And it was published by the Office of National Drug Control Policy to make sure that the country had a way to really focus their practice and policy on this population of infants and their families.

Q Thank you.

09:14:52

So let's move on to the next -- the second population, which is infants born with NAS and prenatal opioid exposure.

What is depicted in this slide, Dr. Young?

A So we have mentioned this already, the immediate withdrawal symptoms that infants can experience after birth if they've been exposed to opioids during pregnancy. That's a list of the symptoms that pediatricians and neonatologists are monitoring to determine that this is an infant that may need intervention in that immediate postnatal period.

09:15:10

There -- the variation of which infant displays

09:15:37

difficulty feeding or respiratory problems, it's a whole spectrum that requires neonatologists and pediatricians to be monitoring babies to determine if they actually need medication also to relieve their symptoms.

09:16:04 **Q** So this slide, slide 19, is entitled: Children Affected By Prenatal Opioid Exposure, NOWS and NAS.

Now, we've heard about NAS, neonatal abstinence syndrome. What is NOWS?

A NAS, or neonatal abstinence syndrome, was coined in 09:16:29 the 1970s to describe withdrawal of infants from opioids during that time period. Since the '70s, NAS has become the diagnostic code that, again, pediatricians, neonatologists use for this withdrawal symptoms.

But I mentioned the Assistant Secretary For Health 09:16:54 that recognizes we really need to have specific diagnostic criteria for what is opioids and what may be other drugs that the -- that the mother may have taken. So the NAS is a larger pool, if you will, but only recently, only in the last actually six months, has the Department of Health and 09:17:19 Human Services come out with this diagnostic criteria for neonatal opioid withdrawal syndrome.

So at present, most communities are still using the diagnostic codes for NAS, but, certainly, we're hopeful that as this information gets out more broadly, that we can make 09:17:37 a finer diagnosis of knowing the maternal history and being

able to monitored opioids specifically.

Q So what specifically does this slide depict?

A In -- if we look at those rates of this pretty dramatic increase of diagnoses in Ohio, from 2006 to 2015, the increase eight times over of 155 out of 10,000 births with a diagnosis of neonatal abstinence syndrome, if we use those percentages and apply those to the number of births in Lake and Trumbull County, you see in one year how many infants we're talking about.

09:18:26 So during that time period of -- that the data are available for looking at the number of infants.

Q All right. From your 30-year experience looking at data such as this, why is it that you believe that it is appropriate to apply this -- this data on a percentage basis to Lake and Trumbull?

A Well, these data in particular from hospital diagnostic coding that happens for paying claims, researchers have looked at those data to determine by state what is the rate of NAS diagnoses at birth. So these are Ohio-specific data. And the data for Ohio applied to the births in Lake and Trumbull is very appropriate to look at the number of infants that were exposed.

And I misspoke when I said that that was in one year. It's actually the number of births that are over a period of time, a very small number of births actually in the two

counties.

Q Right.

So slide 20, which is entitled: Children Affected By Prenatal Opioid Exposure and NAS, this is a -- contains a table from your report.

Would you describe it for us, please.

A So as I mentioned, looking across the developmental spectrum, that drives the interventions. How old is the infant? So we looked at infants and toddlers to determine how many infants and toddlers there are in these two counties that would determine the number of infants and toddlers who need assessment and potentially interventions.

So the opioid exposure I mentioned, the 6.6 percent, and while not all 6.6 percent of infants will display withdrawal, they need to have assessments to ensure that they're meeting their developmental milestones, so you see the numbers that had opioid exposure.

And this is based on 2017 data, because that is the most recent data in the scientific literature about the prevalence rates of NAS in the state of Ohio. So, again, applying those Ohio rates to these two counties is the number of births.

Then we know from following children with diagnoses how many of them end up needing special education services. It's about just over 19 percent of infants with NAS

diagnoses who need special education. So you see in Lake and Trumbull the number of children that will affect the school districts in those two counties.

And then, the data that I mentioned that track by state the NAS, this is also a more recent development in the literature, that they also look at the delivering person's diagnostic codes. So they were able to determine how many women went to the hospital to deliver a baby who had an opioid-related diagnosis that was coded in the billing system. So you see how many infants with an opioid-related diagnosis of their mother.

Q So for the record, would you tell us, give us the numbers under each of these categories for Lake and Trumbull, please.

A So for Lake County, prenatal exposure, 443. Those with prenatal exposure that would need special education services, 85. The number that were born to a woman with an opioid-related diagnosis, 105.

The estimated number from that, with -- that would actually have an NAS diagnosis, 77. And then, again, applying the percentage of infants with NAS diagnoses who have special education needs, there would be 15 in -- per year.

And similarly, for Trumbull, the numbers of infants and toddlers in Trumbull County were about 6,300. Opioid

exposure and special education needs, about 80. Born to a woman with an opioid-related, about 100. And estimated number with an NAS diagnosis, 73 of those. And those that would need special education would be 14 of infants and toddlers who were zero to two in that time period, 2017.

09:23:18

Q So this next slide, slide 22, describes the immediate interventions for children affected by parental opioid exposure and NAS.

Would you go through this with us, please.

09:23:39

A So what pediatricians, neonatologists have learned over the last decade in particular, really starting at a specialized nursery at Yale, that they began to observe different ways to work with infants and their mothers. That required a change in the NICU approach and really looked at the developmental milestones for an infant.

09:24:08

So doing observations about is the infant able to eat? Are they able to sleep for an appropriate period of time? And can the infant be consoled? So it's referred to as the Eat, Sleep, Console method.

09:24:27

And the physician at Yale who really organized this and has studied this has said the mother is the first line of medicine, meaning that as -- as mothers and infants need to bond, that hospitals needed to ensure that mothers and infants had the place that they could do that. They've changed the way that hospitals have worked with mothers and

09:24:51

their infants to really focus on the assessment of is the baby eating? Are they sleeping? Can they be consoled? When that doesn't work, the pharmacological methods that need to be put in place to make sure that the baby can develop and thrive.

09:25:12

And then, importantly again, the specialized treatment units that are allowing parents, mothers in particular, to comfort their babies, just like probably everyone that's in the room who experienced that wonder of birth in that critical time period just after birth when you just have to bond with that baby, so they changed the way that those -- those methods are going.

09:25:31

It shifts the automatic send the baby to the NICU to revamping hospitals and their approach to ensure that the dyad of the mother and the infant can stay together. And then, as I mentioned, the implementation of the safe plan of care before the baby goes home.

09:25:54

Q So back to slide 13. We're now on to the third population, children affected by prenatal opioid exposure, and your next slide describes the effects on those children.

09:26:14

Would you please go through that with us.

A These data come from, primarily from the American Academy of Pediatricians who have reviewed the literature over these long periods of time to understand the effects for children who have prenatal exposure and have diagnoses

09:26:35

of NAS in particular and what that means about, again, this early intervention that's needed for toddlers, what happens in school age.

There's been a few studies, one very important one from Australia that looked at their standardized testing for all children in that area of where the researchers were, and they looked over time at the infants who had had an NAS diagnosis, those that were similar to those infants from the same jurisdictions, and found that over time their academic performance actually deteriorated on their standardized testing.

So the school age interventions, the speech and language, the issues with educational testing scores being low, lower attention scores, all of those put a burden on the school districts because, as we know, the school districts are required to implement special education services whenever a child is identified as needing special education, so this is a tremendous burden for schools to ensure that those services are in place.

And then the -- again, the behavioral and academic challenges for high school.

And as we -- as we have been able to follow children longer, this critical time period of adolescence and young adulthood. In particular, very disturbing studies that have looked at children of parents with an opioid use disorder

and increased suicide attempts and increased successful suicides among this population of adolescents.

I'm sure we're all familiar in the media of the call to action that the surgeon general has done about the mental health problems for adolescents, that the living with a parent with an opioid use disorder is one of those big risk factors for that population.

Q All right. So your next slide describes developmental spectrum interventions. This is slide 23.

Describe this for us, please.

A Some of these we've talked about already. The need for ongoing assessments. It's not a onetime thing, oh, this child looks fine at 12 months and then we can just walk away. We have to ensure that the developmental assessments are done over a period of time, so fine motor, neurodevelopment, all of these -- speech and language, all of these aspects of what a child has to do across their areas of development need ongoing assessments.

We've mentioned already the need for special education services for those children that begin to fall behind, sensory integration, being able to attend to task, all of those components that have been documented in the literature as an effect for these children.

The mental health supports, particularly if they're living in a family in which they have been separated from

their birth parents. I mentioned the multigenerational effects for grandparents and kin who are stepping in to parent these children. We've never really seen these numbers of children that become orphaned, and the impact on the family becomes very extreme.

09:30:35

So the individual counseling, as well as the family focused interventions, not just for the child but for the family and the intergenerational component of the grandparents who are parenting these children.

09:30:55

It shifted about 2013, if my memory serves me right, that if the data system recorded that the parent had a substance use problem and that was associated with the child's removal, that child was more likely to be placed in a kinship provider than in a foster home. So, again, the

09:31:20

impact on the family of parenting children that you're grandparents and you're expected to move on and your children are, you know, out of the house, and these are parents who are dealing with their own child's opioid use disorder or the death of their child and now the

09:31:38

responsibilities for the grandchildren.

Q So the fourth population that you've described earlier is children involved in child welfare services affected by opioids and other substance use disorders.

What does this slide depict, number 24?

09:31:58

A That is the continuum of the interventions that child

welfare puts in place on behalf of children with allegations of abuse or, more often, much more often, neglect. Particularly when we're talking about this population, the allegations are of neglect.

09:32:17 So I described already the hotline reports, the investigations, and assessments, making a determination with a report to the court about the allegations and should those allegations be substantiated.

Whenever possible, ensuring that the infant or the 09:32:37 child can stay with their birth family, so in-home services means that the family is provided services without removal.

And then, the smaller population of children who are placed in foster care or kinship care, and then those that need a permanent place to live, in which case they move into 09:33:01 the adoption caseload.

So it's the continuum of child welfare practice.

Q So I'm going to ask you a question that may be obvious, the answer may be obvious to all of us, but I need to ask it for the record.

09:33:13 With respect to the -- in Ohio, the child welfare system, who bears the burden of that?

A Taxpayers.

Q Through county -- through county agencies?

A Yes. That's correct.

09:33:26 The county agencies contribute to the child welfare.

The state puts in money to pay for these services. And the federal government. So we all pay for these services for child welfare.

And important for adoption, because most people don't recognize that if a child is adopted from the child welfare system, the law was changed in 1999 in order to try and support adoptive families, so that child is entitled to Medicaid throughout their life until they transition to adulthood. And so, the mental health services, all of those kinds of things that Medicaid pays for in a state are allocated to ensure that that child gets the services that they need.

So, again, all of us, the taxpayers, are paying for those services.

And the family, without being means tested, meaning that any family that adopts a child out of the child welfare system is entitled to income support as though the child was placed in foster care, so that they have the revenue needed, the income needed to ensure that that child has food, clothing, education, the things that parents pay for.

So it's an ongoing expense to the county, to the state, and to the federal government. While we want permanency, absolutely, in that caregiving environment for that child, I think most people don't recognize, it's an ongoing financial burden to the taxpayers.

Q So to the extent that there's an abatement remedy that's decided in this case that provides funding from the defendants to these -- to these counties, that takes the burden off of these funding resources as well as the 09:35:26 taxpayers, correct?

A Well, the county pays a portion of the adoption assistance throughout the life of that child, so the burden is being borne by the child welfare agency, both at the county level and at the state level.

09:35:41 **Q** Okay. Now, this next slide depicts the effect or the trends in out-of-home care associated with the increase in overdose deaths.

Would you explain this to us, please, slide 25.

A This was a study that was conducted by the Assistant 09:36:04 Secretary For Planning and Evaluation, which is a department within the Department of Health and Human Services.

And they looked at the county level for the association of the overdose death rates and these foster care indicators. So we described reports of maltreatment, 09:36:24 those that get substantiated as founded by, the Court makes that determination, and then foster care placement.

And what they found, that for every ten percent increase in the overdose death rate, that was associated with these foster care indicators of increased reports of 09:36:44 maltreatment, increased substantiations, and increased

foster care placements.

THE COURT: All right. What are substantiated reports? What is that?

THE WITNESS: So if you call the hotline and say, I'm concerned about my neighbors' child, that's an allegation. You would say the child's left unsupervised and I'm making essentially this allegation to child welfare.

THE COURT: So that's something other than maltreatment, just general concern that is substantiated?

THE WITNESS: When it becomes maltreatment is when the judge says these allegations are substantiated. Child welfare has the burden to do an investigation, write a report to the court, say this is what I found, here's the evidence. The judge makes a determination if those allegations have been substantiated.

THE COURT: Thank you.

BY MR. WEINBERGER:

Q Now, this next slide, number 26, is a graph from your report.

What is this graph intended to demonstrate?

A Well, what we have been observing over the last 15 years in particular is this increasing rate of infants who are being placed in care.

So I've already talked about this, you know, sweet spot of intervention. Infants have to have permanency in

their caregiving environment. They have to bond with an -- with a caretaker. You have to make that eye contact. You have to do that talking back and forth with a baby.

So there's a lot of attention because right now in our 09:38:25 country about 50,000 babies are placed in out-of-home care each year. And this has been an increasing trend over the last decade, 15 years in particular.

So this looks at the data of infants, so children under the age of one, who were placed in out-of-home care in 09:38:46 Ohio. And then I mentioned that we needed to group the small counties and the large counties. So you see that Ohio overall is the blue line. That is the percentage of overall children who are infants who are being placed in care.

But in the small counties, it's a percentage that is 09:39:08 somewhat higher than Ohio overall, and the large counties have a somewhat lower rate of infants who are going into out-of-home care.

But this increasing trend means that the child welfare agencies in our country, in Ohio, in Lake and Trumbull, are 09:39:28 dealing with infants and young children who have all of those situations that we've been describing, the developmental needs, the need for ensuring permanency in their caregiving environment. And this shift has meant that a large number of the children who are in foster care, about 09:39:49 40 percent, are under the age of five, young children that,

my view I guess, would be that we have a responsibility to ensure they can have the best outcome possible.

Q So this next slide is entitled: Parental Drug Abuse As Child Placement Factor. And looks at the time frame or the change between 2007 and 2017, correct?

A That's correct. Over the decade, these are change -- percentages in change over that time period.

And the characteristics of the things that are in the rows on the left, those are the types of checkboxes, if you will, that the worker can check off about what's associated with this child's placement.

So I mentioned that there's a data system that once a child gets put in foster care, they can say what were the things that were going on with the family that were associated with that parent's -- with that child's placement.

And you see this dramatic increase in Ohio that drug abuse by the parent is the largest increase of any reason for removal.

Q And that increase is 17.43 percent over the time -- over that ten-year time frame, correct?

A Yes, it is.

Q So what are the impacts on children in the child welfare system?

A We've talked about some of these already. Even

though, as adults, we might be saying, this is the best place for you to go, you need to be removed from your parent, but that is a very big, traumatic experience for any child, even young children, that need to be placed in protective custody, so that trauma experience for the child.

09:41:51

And particularly, if the child is not placed with a relative or they are placed with a relative and they have to move from relative to relative or foster placement to foster placement, each of those changes creates another traumatic experience of separation for that child.

09:42:08

So the child welfare system is where we turn. Children services is who we turn to to say, help these individual children to be able to have the best adulthood that they can by providing the social services, the mental health services, the emotional and behavioral services that are needed so that child has their best, best chance.

09:42:27

And then, we know for years now of being able to look at what happens to kids. Foster care is terrific. We have to have it. It's really not the best place for a child to grow up. For all of those things, they need to have their culture, their neighborhood, their family to remain the same. So all of those things that get shifted from time to time for kids, they really face a lot of difficult situations as they transition to adulthood.

09:42:50

A prominent researcher in the field just refers to it

09:43:13

as these kids have rotten outcomes. Best as we can, we need to be able to sustain the family in a way that that individual child remains with the family whenever possible, and we know how to do that to ensure that the family has the supports that they need to parent their child.

09:43:35

And you see the list of the young children that become homeless, they have much lower likelihood of attaining higher education. All of those things become burdens to society, burdens to counties.

09:43:54 **Q** And all of this impacts the child welfare system itself, right?

A Yes. We've known for a while that, you know, worker turnover is a very big challenge in the child welfare system. I mean, if any of us could imagine being that

09:44:13 frontline worker who goes out to do those investigations and the trauma that they experience by seeing children that are in these kinds of placements and in these kinds of situations.

The "Great Resignation," we know that from these last

09:44:29 couple years of the pandemic. We're experiencing that in every line of business but particularly in the health and human services, that that is a big challenge.

That means it's a financial burden on counties to meet the needs of these workforce challenges for the recruitment,

09:44:49 the training, the ongoing training that's needed, and ways

to retain the staff. So there's a lot of education that's going on and sharing experiences from counties to counties and states to states now on how you can retain workers, because it's at such a critical phase.

09:45:09 **Q** So we're about to end.

A Yes.

Q But let's end with the fifth category of population, which is adolescent and young adults. And your slide 30 contains information about that.

09:45:26 Would you tell us what this depicts.

A Yes. Children of parents with opioid use disorders are just at greater risk of developing their own substance use disorder, from both the potential of the prenatal exposure but also the postnatal environment, that they have

09:45:43 a higher likelihood of developing their own problem.

In part, for children, adolescents who begin to experiment and use, that I think most people recognize happens in adolescents. But for these kids that have a parent with a substance use disorder, they are at higher

09:46:07 risk for developing their own problem, as well as we know the areas of the brain that are not completely developed in adolescents for decision-making, emotional regulation, impulse control.

All of these things place these kids at higher risk

09:46:25 for problems, meaning that we need targeted prevention and

interventions for that population.

Q And then, the final slide really kind of sums up the various interventions and systems that are required to deal with the effect of the epidemic on children and families.

09:46:48 Could you go through this with us, please.

A I'll try and do that briefly. It is a little complex.

But what I have learned over 30 years is that there are certain practice interventions that communities need to put in place. That's the middle row of these strategies.

09:47:08 So a way to identify parents and their children who have challenges related to substance use disorders, how we get early access. It's not okay at the time that the judge says, your child is going to stay in out-of-home care, to give a parent a phone number and say, go find treatment.

09:47:31 We have to have interventions that day to be able to ensure that that parent is able to get into services. And we've demonstrated this over many years now, that when that happens, the parent has a much higher rate of compliance with treatment, treatment engagement, better chances of

09:47:46 reunification.

We know, too, that it's not okay to just say you're on your own. These are complex social services. How do you get someone the recovery support services that they need to keep them engaged.

09:47:58 I've mentioned already the need for family

centeredness and the way we address children, infants, and their parents. And the beauty, really, of the way in which the courts have stepped up in this docket of civil court to increase the frequency of monitoring and ensuring that parents are engaged in services.

09:48:20

The top row are the kinds of system supports that communities need to have, a way of training, a way of looking at their funding to ensure that there's -- these services can stay in place. And then we've documented over these years the outcomes that are achieved when communities are able to put these practices and systems in place.

09:48:36

Q Thank you, Doctor.

MR. WEINBERGER: Pass the witness, Your Honor.

MS. HACKER: Your Honor, if we could just have a few minutes to set up the technology.

09:49:06

THE COURT: Okay.

CROSS-EXAMINATION OF NANCY YOUNG

BY MS. HACKER:

Q Good morning, Dr. Young.

09:49:51

A Good morning.

Q We haven't had an opportunity to meet before, so I want to start by introducing myself.

My name is Kat Hacker, and I represent Walgreens in this case.

09:50:00

As you explained earlier, you understand the focus of

this trial is abatement, right?

A Yes, I do.

Q And the testimony you are giving us today relates to some of the needs of special populations, like infants, children, and families, right?

A That is correct.

Q Just to orient all of us, that is what plaintiffs have called here Category 4, addressing needs of special populations in their abatement plan.

Is that familiar to you?

A Yes, it is.

Q Have you spoken to Dr. Alexander about this case?

A Yes, I have.

Q When did you speak with Dr. Alexander?

A At some point before submitting our reports.

Q You didn't rely on Dr. Alexander's opinions in this case?

A My report was done independent of Dr. Alexander's report. But I am familiar with the way in which he has crafted the abatement plan.

Q Do you know if Dr. Alexander relied on your opinions in this case?

A In some situations, some of the data that I provided about particularly the child welfare system and rates of neonatal abstinence syndrome, I believe he relied on in this

case.

Q Have you spoken to Dr. Harvey Rosen about this case?

A No, I have not.

Q Have you spoken to Dr. John Burke?

09:51:35 **A** No, I have not.

Q So I take it you have not reviewed the report of Drs. Rosen and Burke in this case?

A Not that I recall.

Q Let's start today by talking about the groups of

09:51:47 people you discussed.

One group being pregnant women with opioid use disorders.

Do you remember that?

A Yes, I do.

09:52:00 **Q** And you and Mr. Weinberger showed us this slide that has a chart with one of your estimates, right?

A That's correct.

Q To get this estimate, you start with the assumption that 6.6 percent of women reported using prescription

09:52:18 opioids during pregnancy?

A Yes. That's correct. That's what the CDC has reported.

Q And for the record, this demonstrative was marked as Plaintiffs' Demonstrative 77.

09:52:34 In parentheses here, you cite to 2019 PRAMS; is that

right?

A Yes. That's correct.

Q PRAMS stands for Pregnancy Risk Assessment Monitoring System. Did I get that right?

09:52:49 **A** Yes. Yes, it does.

Q And that Pregnancy Risk Assessment Monitoring System is a survey project performed by the Centers for Disease Control?

A Yes. That's correct.

09:53:00 **Q** And the 6.6 percent figure that you use comes from an article by Dr. Ko and a number of other authors that use that PRAMS data?

A Yes. That's correct.

Q Let's take a look at that article together.

09:53:21 Do you see that the title of this article is "Vital Signs: Prescription Opioid Pain Reliever Use During Pregnancy"?

A Yes, I do see the title.

MR. WEINBERGER: Your Honor, can we see -- can

09:53:34 we have the article?

BY MS. HACKER:

Q And just to be clear, Dr. Young, this is a report that you cite in your expert report?

A Yes, it is.

09:53:44 MR. WEINBERGER: Can the witness be given a

copy of this report?

MS. HACKER: May I approach?

THE COURT: Yes.

THE WITNESS: Thank you.

BY MS. HACKER:

Q And just so we're clear, this is the Dr. Ko article that you relied on in your report, right?

A Yes, it is.

Q This publication is not specific to Ohio?

09:54:14 **A** No, it is not. Ohio does participate in PRAMS, but it is not broken out with specific Ohio data.

Q Let's look at Ohio's participation here, since you mention that.

Down here in these footnotes, we see the various

09:54:31 states that participate in PRAMS, right?

A Yes.

Q And we can see the different response rates for each state.

Do you see that, Dr. Young?

09:54:43 **A** Yes, I do.

Q And Ohio's response rate right here is 34.2 percent.

Do you see that?

A Yes, I do.

Q It's actually the lowest response rate of any state

09:54:52 that participates in PRAMS?

A That's correct.

Q And as you said, the statistics aren't separately reported for Ohio?

A That's correct.

09:55:03 **Q** The statistics that are used in this article are also from 2019; is that right?

A That's correct.

Q So there's no data from this year?

A Not that's been released at this point.

09:55:18 **Q** There's no data from last year?

A 2021 has not yet been released, correct.

Q Has 2020 been released yet?

A Not that I am aware of.

Q Now, of the 6.6 percent of women who reported using

09:55:34 prescription opioids during pregnancy, some of those include medically appropriate opioid exposure under a doctor's care, correct?

A That is correct.

Q And, in fact, Judge Polster asked you a question

09:55:49 earlier about whether this included women who were prescribed opioids versus who obtained them through diversion.

Do you remember that?

A Yes, I do.

09:55:58 **Q** And your answer was: We don't know to what extent

that -- which that population is.

Do you remember that?

A Yes, I do.

Q Let's take a look at a table in this article to help answer that question for us.

I'm pulling up what is on page four, table 2. The title of it is: Sources of prescription opioids and reasons for use among respondents reporting use during pregnancy.

Do you see that?

A Yes, I do.

Q This table shows us that 91.3 percent of the women who said they used prescription opioids during pregnancy were actually prescribed opioids by a health care provider; is that right?

A I do see that.

Q In fact, a majority of the women who reported using prescription opioids during pregnancy here were prescribed that opioid by their OB/GYN?

A Yes, I do see that.

Q And a little further down this table, we also see the reason for prescription opioid use that these women reported.

Do you see that?

A Yes, I do.

Q This shows us that 88.8 percent of these women used

prescription opioids during pregnancy to relieve pain?

A Yes. That's correct.

Q There's nothing in this publication that says these 6.6 percent of women have an opioid use disorder?

09:57:29 **A** That's correct.

Q And there's nothing in this article that says these 6.6 percent of women even misused prescription opioids?

A It doesn't say that specifically, but we do know that a smaller percentage used them for reasons other than pain.

09:57:48 And I believe my report does say that that 6.6 places the infants at risk, and that not all of those infants would develop adverse consequences after birth.

Q So since you mentioned it, let's talk about how many of these women used prescription opioids for a reason other

09:58:09 than pain.

This table tells us the precise amount. It was 14.4 percent of those women who used prescription opioids for a reason other than pain; is that right?

A Yes, it is.

09:58:20 **Q** So going back to the slide that you and Mr. Weinberger showed us earlier, the title of this slide, Pregnant Women With OUD, does not actually refer to the estimates you're providing us, right?

A It refers to the risk for infants. But you're

09:58:53 correct, it is all women using for the 6.6.

Q So just to be clear, that 6.6 percent of women are not women who had opioid use disorder during pregnancy?

A They're inclusive of those that had opioid use disorder, that's correct.

09:59:11 **Q** They're inclusive of, but it is not 6.6 percent of women who have opioid use disorder during pregnancy?

A That's correct.

Q Because the population of women using prescription opioids during pregnancy is different from the population of

09:59:27 women who have opioid use disorder during pregnancy, right?

A The women with opioid use disorder are -- are part of the overall population, that's correct.

Q They're a subset of that population?

A Yes, they are.

09:59:43 **Q** I want to ask you about the difference in two other populations you've looked at.

You spoke a little today about how adolescents have been impacted by the opioid epidemic, right?

A Yes.

09:59:54 **Q** In your report, just to orient us, you have a section on children, adolescents, and young adults, right?

A Yes, I do.

Q And if we page forward, just a few pages in that section -- one more page, there we go -- you explained that

10:00:21 the NSDUH data -- and just to be clear, NSDUH is the

National Survey on Drug Use and Health, correct?

A Correct.

Q So the National Survey on Drug Use and Health data shows that almost 1 million or 17.6 percent of adolescents are estimated to misuse opioids; is that right?

A Yes. That's correct.

Q And this comes from page 24 in your report.

Misuse, by the way, is just another way of saying using opioids nonmedically, right?

A I'm not sure if the survey on drug use and health categorizes it in the same way that you've just categorized it. They have specific operational definitions of what does misuse mean.

Q Understood.

Then you continue here to explain that among adolescents who misuse opioids, an estimated 2.6 percent are estimated to have an opioid use disorder; is that right?

A That's correct.

Q Meaning, as you explained earlier, the group who has an opioid use disorder is a smaller subset of those who misuse opioids?

A That's correct.

Q We see here there's a substantial difference in the group who have an opioid use disorder and the group who merely misuse opioids?

A I think what's important, however, is that adolescents who are misusing opioids are placing themselves and the other kids that they're driving with, the rest of their family, they're placing them at great risk for the things that we spoke about about adolescent development. They don't yet have all of the frontal lobe of executive functioning developed, so they place themselves in risky situations anyway. So misusing an opioid and the developmental stage of adolescent is a very critical time.

10:02:32 **Q** You would agree that the subset we see here that is 2.6 percent of adolescents who have an opioid use disorder is a substantial difference than the larger group that merely misuses opioids?

A I -- I agree that 2.6 percent is smaller than

10:02:52 17 percent, but I think it's a critical population for all of us to be very concerned about, both the 17 percent and those that have gone on to actually develop the criteria that would classify them as a opioid use disorder.

Q You don't think 2.6 percent is substantially smaller

10:03:14 than the larger group that misuses opioids?

A I think I actually said that, I agree that it is substantially smaller, but both populations are critical.

Q Let's talk about another one of the groups you discuss, infants with prenatal exposure.

10:03:31 An infant who has prenatal opioid exposure could have

been exposed in a variety of ways, right?

A That's correct.

Q They could have been exposed from a mother who is using opioids as directed by her doctor?

10:03:44 **A** That's correct.

Q They could have been exposed from a mother who is misusing prescription opioids?

A Yes. That's correct.

Q Or they could have been exposed from a mother who is

10:03:55 using an illicit opioid like heroin or fentanyl who never used prescription opioids?

A I don't think the data substantiate that there are many of those women who have never, but, yes, you're correct. Pregnant women, women in general don't typically

10:04:15 start, you know, using heroin as the first thing that they use. But you're correct, there are three different populations. I'm very aware of those. And they each need a different kind of intervention.

Q So you agree that it is possible that an infant could

10:04:33 have been exposed to opioids prenatally from a mother who used heroin who never once used prescription opioids?

A It is possible.

Q Of this group of infants with prenatal opioid exposure, some of them may be diagnosed with neonatal

10:04:54 abstinence syndrome, as you explained earlier?

A Yes. Both -- all three of those populations. And, actually, you haven't referenced women who are on medication-assisted treatment whose infants also could go through withdrawal. So rather than perhaps the three populations, we're really talking about four. So women who are prescribed methadone, buprenorphine can also have an infant who goes through withdrawal.

Q So of those four sets of women, there's a portion where the infant may be diagnosed with neonatal abstinence syndrome?

A There is a portion, yes.

Q A large percentage of infants born with neonatal abstinence syndrome are covered by Medicaid, right?

A Right. As I -- as we talked about, they're paid for by the taxpayers, correct.

Q So Medicaid already pays for the majority of medical care and treatment costs for infants with neonatal abstinence syndrome?

A Actually, in our country, Medicaid pays for more than half of the births. But, again, that's not free money. Just because it's a Medicaid-covered benefit, it's not free to all the rest of us.

Q And when you say it covers more than half the births, I believe the static you cite is that 82 percent of those costs are paid by Medicaid; is that right?

A By the federal government, with a matching rate to the state of how much the state pays for their reimbursement for Medicaid, that's correct.

Q And it is 82 percent that are covered?

10:06:29 **A** I don't -- I don't recall that for that specific match rate for Ohio of how much the Ohio-specific public pays for their portion of the Medicaid costs.

Q Let's see if I can refresh your recollection. We'll take a look at your report, which I'm pulling up on the

10:06:49 screen, at page 16.

You recognize this as your report in this case?

A Yes, I do.

Q And I'll point you to this sentence right here: The majority, 82 percent, of costs were paid by state Medicaid

10:07:13 programs.

Do you see that?

A Yes, I do.

Q In addition to Medicaid, Ohio receives other sources of funding to address the opioid epidemic, right?

10:07:27 **A** Yes. The taxpayers have made additional resources available.

MR. WEINBERGER: Your Honor, if I can just interrupt.

THE COURT: Yes.

10:07:38 MR. WEINBERGER: May we have a continuing

objection to testimony elicited regarding Medicaid, third-party sources of funding, or the like?

THE COURT: Well, overruled.

Of course, I'll deal with it, but the defendants have raised it, so if the doctor knows, she can answer it.

BY MS. HACKER:

Q Dr. Young, I don't think you had an opportunity to answer the question, so I'll re-ask it for you.

In addition to Medicaid, Ohio already receives additional sources of funding to address the epidemic, right?

A Yes. Congress has made money available to all of the states and communities because of the opioid crisis.

Q Let's talk about some of the funding that Congress has made available.

In the last two years, the federal government has actually instituted some very significant federal funding for people with opioid use disorder specifically, right?

A Yes. That's correct.

Q One of those programs includes the American Rescue Plan?

A Yes, it does.

Q That included $3 billion earmarked for substance abuse prevention?

A I'm not sure if that allocation was for prevention. I

believe that 3 million was -- I'm sorry -- again, the dollar figure you gave me was three --

Q 3 billion.

A 3 billion. That's what I thought. But that's not all prevention. It's prevention and treatment and recovery services administered by the states.

Q So that 3 billion goes to substance abuse programs?

A Prevention, treatment, and recovery, correct.

Q Last year, Congress also passed the Consolidated Appropriations Act, I believe it was known as H.R. 133, right?

A Yes. That's correct.

Q And that included another 3.8 billion in funding for substance abuse treatment?

A Yes. Showing the impact of opioids on our states and communities, correct.

Q And it did include funding specifically for opioid prevention and treatment?

A Yes, it did.

Q That bill also included 208 million for substance abuse prevention, right?

A I don't have those figures off the top of my head. If you're reading from the statute, then that sounds -- the allocation for all block grant funded programs has 20 percent set aside specific to prevent substance use

problems, correct.

Q So 208 million sounds about right?

A If that's 20 percent of the overall allocation, then yes.

10:10:12 **Q** Another source of federal funding is the 21st Century Cures Act, which established the state-targeted response to the opioid crisis program, right?

A Yes. That's correct.

Q And the federal government provided nearly $1 billion

10:10:28 through that program?

A Yes. Senator Portman and Ohio was instrumental in getting those monies because of the impact that he saw in his state, correct.

Q And Ohio, in turn, specifically received over

10:10:42 $52 million through that grant program?

A I don't know those numbers off the top of my head, but Senator Portman did make sure that Ohio had funds because of what he was seeing in his state, correct.

Q Let's take a look at your report again and see if that

10:10:59 helps.

This is appendix two from your report. Do you recognize that?

A Yes, I do.

Q And this is marked as Plaintiffs' 23129.

10:11:09 Do you see here your description of the 21st Century

Cures Act?

A Yes, I do.

Q And you note that Ohio received 26 million in federal funding in 2017, right?

10:11:25 **A** Yes.

Q And another 26 million in 2018, right?

A Those are the allocations to Ohio that Congress made available for the opioid crisis, correct.

Q So Ohio was allocated about $52 million through the

10:11:40 21st Century Cures Act?

A Yes. That's correct.

Q And we see here that that money supported a range of projects and services; is that right?

A Yes.

10:11:52 **Q** Including medication-assisted treatment for opioid use disorders?

A Yes. Each state could create their own plan of meeting their own needs, so it was fairly flexible dollars to be driven by the state's own needs assessment about what

10:12:12 kinds of services they needed to put in place.

Q So the state can take those dollars and use them for other things that you listed here, like vocational training, housing, family recovery coaching, and peer support; is that right?

10:12:27 **A** Yes. Those were the overall what could -- those

dollars could be spent on, correct.

Q Are you aware that the entire state of Ohio did not even end up spending all of this $52 million?

A I'm not aware of that specific in Ohio. I am aware of that being a serious problem across the states.

THE COURT: All right. I'm not sure how that's relevant unless it bears specifically on what went to Lake and Trumbull County.

MS. HACKER: Well --

10:13:07 THE COURT: What Ohio did or didn't do in a -- in some past year, how -- so, I mean, if you want to spend your time on it, that's fine, but, again, I don't see the relevance. But you've got limited time, and if you want to keep asking the questions, it's up to you.

10:13:26 MS. HACKER: Thank you, Your Honor. We do believe it's relevant if the state of Ohio has leftover monies, but we understand that it is our time to spend.

THE COURT: I'm not -- I'm not allocating any money to the state of Ohio out of any abatement plan. They're not -- they're not a plaintiff.

So the issue would be if -- certainly, if you can show that Lake and Trumbull County received money for specific services that the plaintiffs are seeking in their abatement plan and they're not using it, that would be relevant.

10:14:00 But, again, it's your time and your questions, and if

the witness knows, she can certainly answer.

BY MS. HACKER:

Q Dr. Young, you're also aware of the Substance Abuse and Mental Health Services Administration; is that right?

10:14:19 **A** That's correct, I am.

Q Earlier I believe you used the abbreviation SAMHSA?

A SAMHSA, correct.

Q SAMHSA.

SAMHSA awarded Ohio another $17 million in 2022 to

10:14:33 address substance abuse; is that right?

A Again, I don't know those numbers off of the top of my head. If that is the allocation for the regular substance abuse prevention and treatment block grant, then that would be an allocation from SAMHSA to the State of Ohio.

10:14:53 **Q** And when there is an allocation from SAMHSA to the State of Ohio, the STATE of Ohio can allocate those funds to different counties among the state, right?

A Yes, they do.

Q And do particular counties apply for those funds?

10:15:10 **A** I'm not sure of the requirements in Ohio about the application process. The State is required to tell the federal government about how they've spent it. I don't know that the counties must also submit their plan to the State. I would imagine, but I don't know that specifically.

10:15:31 **Q** I'm showing you what's been marked as Walgreens MDL

Exhibit 5032.

I take it you've been to SAMHSA's website before, right?

A Yes, I have. I've been to SAMHSA offices several times, yes.

Q And, Dr. Young, if you'd like a copy, I can hand it to you, but the whole page is on the screen, so --

A I can see it fine. Thank you.

Q What we have here is a printout from SAMHSA's website, right?

A Yes. That's correct.

Q And just to be clear, it's a government agency within the Department of Health and Human Services?

A Yes, it is.

Q And they publish information about the grants they issue each year?

A Yes, they do.

Q So what we're looking at here is the Ohio summaries of fiscal year 2022?

A Yes. That's correct.

MS. HACKER: Your Honor, Walgreens offers Exhibit 5032, though we understand that Your Honor will take it up at the end of the day.

THE COURT: Okay.

BY MS. HACKER:

Q So I want to direct your attention to the bottom to this line here that says: Total Substance Abuse Funds.

Do you see that?

A Yes, I do.

10:17:06 **Q** This tells us that Ohio received over $17 million in SAMHSA grants for substance abuse in 2022, right?

A That's correct.

Q You said before you've never seen these kinds of funds put into substance abuse treatment in the entirety of your

10:17:28 career, right?

A Never has Congress allocated these kinds of funds, never have they reacted so dramatically to a crisis of substance abuse in our communities, correct.

Q And it's remarkable that there are federal funds of

10:17:44 these amounts being put into communities to address the opioid use and substance abuse problems?

A It's remarkable because of the need, correct.

Q One of the last things I'd like to talk to you about today is what you did not do in this case.

10:18:01 Your background is in social policy, right?

A That is correct.

Q You're not a health care economist?

A No, I am not.

Q And you're not offering any opinions or estimates in

10:18:11 this case about the costs of the various programs or

interventions you recommend?

A That is correct.

Q Throughout your testimony today, it has been clear that you've devoted your entire career to children's -- children and families affected by substance abuse, right?

A That is correct.

Q Children and Family Futures' clients are generally government agencies?

A Most of our funding comes from government agencies, but we're also funded by various foundations.

Q But your clients specifically, not necessarily where the funding comes from, but your clients are government agencies?

A Who we work with are counties, states, and tribes. They would be considered our customers while others are the funders.

Q I would assume that you would like to see this court order funding to provide treatment and services to children and families to address the opioid epidemic in Lake and Trumbull Counties, right?

A I don't know that what I'd like is pertinent to this. What I can tell you is that the impact has been great, and it's evidenced by the funding that has been made available from the taxpayers of our country to clean up the problem.

Q If the Court does implement funds for programs for

children and families in these counties, your company, Children and Family Futures, has the capability to assist in implementing the counties' proposed abatement plan programs related to those populations, right?

10:20:02 **A** All of our knowledge has been developed, the vast majority of our knowledge has been developed with federal funds, so that we provide those services to states, counties, and tribes at no charge to them.

Q You have worked for, I think you mentioned earlier, 10:20:23 the plaintiffs' attorneys involved in this case in other opioids cases before, right?

A Yes, I have.

Q It's been about a dozen cases now?

A No. I don't believe a dozen.

10:20:33 **Q** How many, do you think?

A I believe I've been deposed eight times, and this is the third time to give testimony at trial.

Q Other than those eight times you've been deposed, have you also done work in other cases where you have not been 10:20:50 deposed yet?

A Yes, I have.

Q And in the last three years, roughly, that you've been doing this litigation-related work, it's taken about 10 to 15 percent of your professional time?

10:21:03 **A** Yes. I think what's important is I tend to do this on

weekends and nights, because I have a full-time job.

Q I counted up all the invoices your company submitted across those cases you've been involved in now, and it looks like your company has been paid over $800,000 for your involvement in those cases.

10:21:21

Does that sound about right?

A I actually don't know that figure. You know, I don't do the accounting part of invoicing. I do know that we've been at this for some time, I think three years. So I don't know that figure, to be honest.

10:21:39

Q Do you have any reason to dispute that it's been over $800,000 now?

A I don't have a reason to dispute, but I don't -- I don't have the accurate figure.

10:21:51

MS. HACKER: Pass the witness.

THE WITNESS: Can I -- I'm sorry. Could I do one follow up to that?

THE COURT: Sure.

THE WITNESS: Because you said "your company." It's actually a nonprofit organization. I'm not the owner of the company. I don't benefit from any particular contract per se.

10:22:01

So I realized after you started to walk away that the connotation was that I have benefited. Children and Family Futures is a nonprofit organization, not -- not a for profit

10:22:19

making company that's billing these invoices.

MS. HACKER: Understood, Dr. Young.

THE COURT: Are you salaried?

THE WITNESS: Yes, I am.

10:22:30 THE COURT: What is your salary?

THE WITNESS: This is going to be embarrassing.

THE COURT: Ballpark.

THE WITNESS: About 210,000 a year.

BY MS. HACKER:

Q And understood on your -- on your additional follow-up there, Dr. Young.

I didn't mean any negative connotation by it. I think of it as your company because you founded Children and

10:22:52 Family Futures, right?

A Yes, I did, with my husband, correct.

Q And you're the executive director today?

A Yes, I am. We employ about 65 people. And there's a team that works with me on this, on these cases.

10:23:05 **Q** And you've been the executive director for the entirety of Children and Family Futures' existence?

A Yes. 25 plus years, yes.

MS. HACKER: Pass the witness.

THE COURT: Any other defense counsel wish to

10:23:22 cross-examine, Dr. Young?

MR. MAJORAS: Yes, Your Honor.

THE COURT: Okay.

CROSS-EXAMINATION OF NANCY YOUNG

BY MR. MAJORAS:

10:23:31 **Q** Dr. Young, I'm going to switch locations. Hopefully can you hear me. Okay?

A Yes, I can.

Q My name is John Majoras. I'm one of the lawyers for Walmart. You and I have not had a chance to meet. Good

10:23:53 morning.

A Good morning.

Q I have just a few follow-ups that I'd like to go back to the slides that you and counsel for plaintiffs went through.

10:24:02 First, I'd like to look at, and I'll put it up on the screen for you --

MR. MAJORAS: If I could have the ELMO, please, Mr. Pitts.

BY MR. MAJORAS:

10:24:22 **Q** So the first is from the deck that you went through with Mr. Weinberger, which is slide 27?

In particular, I'd like you to look at the first line, the drug abuse parent with the red that's been highlighted.

Do you see that?

10:24:36 **A** Yes, I do.

Q Now, the drug abuse, is that broken down at all between the particular drug that is being abused or has been abused by the parent?

A No. At this point, that is not. But Ohio has been a leader in trying to make better differentiation by substance, particularly related to the infants that we've been talking about, so in future years, they will be able to break that out. But the data that are presented now are grouped together, that drug abuse by parent.

And I will also say that, as I explain in my report, that this is a severe undercount of those factors that are associated with a child's removal for various reasons about why it doesn't get counted as accurately as we would like.

Q So you have some concerns about the accuracy of the data overall in terms of it being reported appropriately?

A Only that it is undercounted. And we know that from various follow-up research studies that have been done that have looked at the prevalence, as well as my experience of being in every state and asking, does this prevalence rate look right to you, and judges, attorneys, social workers, I've never had anyone say that it's not an undercount.

Q Is it your testimony that only the drug abuse part of this chart is undercounted?

A No. I believe that many times, for reasons related to the data system that many of these items may not be checked,

but the drug abuse in particular is an optional item for the social worker to check, and that's the reason why it sometimes doesn't. And it's the reason why we've actually had folks from Ohio speak to other states about what they're doing to improve their data.

Q So going back to my initial question about the drug abuse portion, the one in red, that's not even broken down between opioids or other drugs of abuse; is that correct?

A At present, it is not.

Q Okay. So that would -- for example, items such as meth and cocaine could very well be included within that red line?

A It could be. I think what's important are, again, the other studies that -- and the American Academy of Pediatrics that says that the NAS rates are being driven by opioids.

Q But in terms of the information presented today, I just want to be clear, you agree that the red line is not broken down by particular substances, correct?

A That is correct.

Q My other question on the chart, and this may go to undercounting as well, are these presented as exclusive reasons or, for example, could a child who has a drug abuse parent also be subject to physical abuse and neglect, just as examples?

A It gets a little confusing.

But I'd like to go back to the previous question, because you said it's not broken down by substances, and alcohol is broken out separately from drug abuse. So --

Q Fair enough. And I meant to say drugs.

10:28:03 **A** Yeah. So I want to clarify that.

And I'm sorry. Could you re-ask the question --

Q I guess my question is, is there any overlap in terms of the data that's being presented? So, for example, are these being reported as the only child placement factors or

10:28:20 can there be overlap? And I'll give you an example.

Could you have a child who has a drug abuse parent, physical abuse, and neglect all reported together?

A It's a little more complicated than that. Because children are not placed in foster care for reasons other

10:28:40 than the state statute that defines abuse or neglect, so the allegations that are substantiated by the Court are various forms of typically neglect. Over 80 percent of children are placed because of neglect.

So there are various -- each state has a statute that

10:29:00 defines what is neglect and what is abuse. So children are placed in out-of-home care for those factors. These are things that the caseworker would say, this is a factor in the case that's associated with the abuse or neglect.

So they can check more than one box. They're not

10:29:21 exclusive.

What's important is that from the time when I started watching these data, it was less than -- about 15 to 18 percent of the time, it was checked that it was drug abuse by the parent. And now, across the nation, it's 40 percent. And if it's an infant, it's over 60 percent of the time that box is checked.

Q So my question may be simpler than that, though. My question is, if a box is -- are these boxes that are being checked exclusive reasons, or can there be multiple reasons checked on a particular placement?

A Yes. I thought I did say that in my long explanation about trying to help the Court and everyone understand these data.

Q The other thing I wanted to ask you about, this chart, I think it's in the title, graph 18, it's percent change over the time period; is that correct?

A That's correct.

Q I'd like you, if you would, turn -- or we'll look at -- do you have the slide deck in front of you?

A Yes, I do.

Q If it's easier, you can look at it that way. But I'm going to go to slide number 19.

And the Court may recall from our prior trial, I have this bad habit of writing on the slides when I put them up, so I'm going to try and just take off my little notation

there. That's the only reason I've got that yellow paper on it.

Okay. Are you with me on slide 19?

A Yes, I am.

10:31:02 **Q** In identifying the infants hospitalized for NAS in both Lake and Trumbull Counties from 2013 through 2017, those aren't actual hospitalization numbers, are they?

A Those are the number of infants born with the rate that has been established from those diagnostic codes

10:31:34 applied to the number of infants.

Q So, in other words, you didn't look through births in these counties during this period and look at specific records of those births to identify whether infants were hospitalized for NAS?

10:31:50 **A** No. The study primary author is Hirai. And they have looked at the diagnostic codes across the country to determine the number and the rate of infants who were diagnosed with NAS.

Q So when you have reported here the 123 and the 229,

10:32:10 that's an estimate based on the rate you described earlier in the slide multiplied by the number of births in those counties during that period?

A That's correct.

THE COURT: So it's an estimate and an

10:32:25 extrapolation from the data?

THE WITNESS: Yes, it is.

THE COURT: Okay. Thank you.

MR. MAJORAS: Give me just a moment.

That's all I have.

Thank you.

MR. WEINBERGER: Your Honor, I have a very short --

THE COURT: Well, there was -- I was going to --

MR. WEINBERGER: I'm sorry.

THE COURT: I wanted to give our court reporter a break.

MR. HYNES: That's fine.

THE COURT: I think -- why don't we take a break now, and then we'll pick up with the balance of the cross and then redirect.

Take a 15-minute break.

(Recess taken at 10:33 a.m.)

(Court resumed at 10:51 a.m.)

THE COURT: You may continue with cross-examination.

CROSS-EXAMINATION OF NANCY YOUNG

BY MR. HYNES:

Q Welcome back, Dr. Young.

A Thank you.

Q Hi. My name is Paul Hynes.

THE COURT: I guess I should say, just technically, you're still under oath, Doctor.

THE WITNESS: Yes, I understand.

BY MR. HYNES:

Q My name is Paul Hynes. I represent CVS. It's nice to meet you.

A Hello.

Q I just have a few questions for you.

10:51:38 I want to turn back to slide 20 of the presentation that Mr. Weinberger did with you.

A Yes.

Q Now, this is a table from your report, correct?

A Yes, it is.

10:51:54 **Q** Okay. And there are certain footnotes that appear in each row, correct?

A That's correct.

Q We don't have those footnotes on this slide, but there probably wasn't space, right?

10:52:07 **A** Correct.

Q Okay. Let's look at, I believe the correct page of your report is page 15, and I've put it up here. I just have a few questions.

The estimated number with prenatal exposure --

10:52:30 **A** That's correct.

Q -- is it correct to say that you estimated the number of births in the two counties based on data from 2015 to '17?

A That's correct.

10:52:43 **Q** Okay. And then, to estimate the number of babies with NAS, you took a percentage, and that's footnote E [sic], based on the percentage of infants with NAS per 1,000 hospital births with NAS. You took that estimated percentage and then applied it to the estimated number of

10:53:16 births you derived from 2015 to 2017 data to get your number; is that correct?

A That is correct.

Q Okay. Thank you.

Now, you testified earlier that you've talked -- you

10:53:32 talked with a few county employees?

A Yes, that's right.

Q Okay. I believe it was two of them you talked with?

A Yes. A gentleman from Lake and a gentleman from Trumbull, correct.

10:53:45 **Q** Right. And you read the depositions of I believe four or five county employees?

A That's correct.

Q You didn't talk with any parents in the counties, did you?

10:53:54 **A** Not in Lake and Trumbull. I've talked to parents in

other counties in Ohio but not -- not directly from Lake and Trumbull, correct.

Q Okay. And you haven't talked with any pregnant women in Lake and Trumbull Counties?

10:54:09 **A** No, I have not.

Q Okay. And you haven't talked with any children in Lake and Trumbull Counties?

A No, I have not.

Q Okay. And you didn't -- you or your organization for this case did not conduct any surveys of parents, pregnant women, or children in Lake and Trumbull Counties?

A No. We rely on the scientific literature, not direct surveys that we would have conducted, correct.

Q Okay. But you in some cases rely on national surveys, don't you?

A Yes. That's correct.

Q And you and your organization, for this case, did not conduct any focus groups with parents, pregnant women, or children in the counties?

10:54:52 **A** That's correct. Not for this case.

Q Now, are you familiar with the ADAMHS Board?

A Familiar with what an ADAMHS Board is and their function. I don't know any of the members of the Lake County ADAMHS Board.

10:55:12 **Q** You didn't speak with anyone from the ADAMHS Board?

A I'm sorry. I missed the first part.

Q I'm sorry. You didn't speak with anyone from the Lake County ADAMHS Board?

A Can I look back to the --

10:55:22 **Q** Sure.

A If you know for sure those folks are not on the Lake County ADAMHS Board, then I can say, yes, I did not.

Q Well, I'm just asking for your best recollection.

A I don't believe that those -- any of those individuals

10:55:36 are on the Lake County ADAMHS Board, correct.

Q Okay. And are you familiar with the Trumbull County Mental Health and Recovery Board?

A I'm familiar with, again, their function and how they operate in Ohio, yes.

10:55:48 **Q** But you didn't talk with anyone from that board?

A I don't believe that the two gentlemen -- the gentleman that I spoke to from Trumbull County is from the board, correct.

Q Okay. Are you aware that those two boards produced

10:56:10 transactional data on treatment services provided to county residents, that they produced that data in this case?

A That data was not made available to me, correct.

Q So you did not review that data?

A No, I did not.

10:56:23 **Q** And you didn't ask the Lake County ADAMHS Board or the

Trumbull -- Trumbull County Mental Health and Recovery Board for any other data to consider?

A I don't recall asking for additional data.

MR. HYNES: That's all I have.

10:56:42 Thank you, Dr. Young.

THE COURT: Okay. Mr. Weinberger.

REDIRECT EXAMINATION OF NANCY YOUNG

BY MR. WEINBERGER:

Q Dr. Young, you were asked about your 6.6 percent

10:57:19 figure from the 2019 PRAMS article, correct?

A Yes.

Q And looking again at that article published July 17, 2020, this looked at statistics from 2019, correct?

A Yes. That's correct.

10:57:45 **Q** And specifically, the background says: Prescription opioid use during pregnancy has been associated with poor outcomes for mothers and infants. Studies using administrative data have estimated that 14 to 22 percent of women filled a prescription for opioids during pregnancy;

10:58:09 however, data on self-reported prescription opioid use during pregnancy are limited.

Do you see that?

A Yes, I do see that.

Q So according to this, 14 to -- 14 to 22 percent filled

10:58:23 prescription opioids during pregnancy, but you used a figure

of 6.6 percent, right?

A Correct. That is what women reported. Correct.

Q So you were using a conservative figure, right?

A Extremely.

10:58:35 **Q** Right.

And in the results where they talk about that 6.6 percent, it says: An estimated 6.6 percent of respondents reported prescription opioid use during pregnancy. Among these women, 21.2 percent reported misuse, parentheses, a source other than health care provider or a reason for use other than pain.

Have I read that correctly?

A Yes, you have.

Q And, in fact, one of the conclusions is that: Improved screening for opioid misuse and treatment of opioid use disorder in pregnant patients might prevent adverse outcomes.

Have I read that correctly?

A Yes. That's correct.

10:59:26 **Q** Implementation of public health strategies, e.g., improving state prescription drug monitoring programs use and enhancing provider training can support delivery of evidence-based care for pregnant women.

Have I read that correctly?

10:59:42 **A** Yes, you have.

Q Are you aware of the fact that state prescription drug monitoring program use is describing not only prescribers using a PMP but also dispensers, like pharmacies like CVS, Walgreens, and Walmart?

11:00:00 **A** Yes, I'm familiar with that.

Q Now, you made the comment that NAS is driven by opioids.

Do you remember saying that?

A Actually, it's the American Academy of Pediatrics who

11:00:20 has said that.

Q So explain that to me.

A Well, because of this situation that pediatricians weren't anticipating the opioid crisis, the opioid epidemic, so, you know, we didn't know as health care providers or

11:00:40 folks who were working in this arena that we needed to make that differentiation in order to count prescription opioids, you know, prospectively, in advance.

So the NAS coding or that diagnostic code, as I said, was created specific for opioid withdrawal. And then, over

11:01:04 time, it kind of got other things, other substances came into being, you know, the methamphetamine era of the mid 2000s. And if an infant was having toxicity, which is different than withdrawal of opioids, based on a stimulant, then there wasn't a diagnostic code to classify those

11:01:32 infants. And so it became both.

But more recently, as we've discussed, Health and Human Services, and specifically the Assistant Secretary For Health, has put out guidance on using opioid withdrawal, specifically for opioid withdrawal, and because of that, we have to rely on these other research studies and other experts who are telling the public, telling us that opioids is what has driven this dramatic increase in infants' withdrawal since, you know, the last decade in particular, which, in turn, drives infants going into out-of-home care.

11:02:22 **Q** So I have -- I've written here opioid use disorder related -- relatedness to NAS, but before I ask you about that.

You were asked -- or you testified that you did not talk to mothers or children in Lake and Trumbull County?

11:02:42 **A** That's correct.

Q Do you recall that?

A I do.

Q Have you over the years, in your experience, talked to mothers and children affected by the opioid epidemic?

11:02:58 **A** Yes, absolutely. A conversation that is extremely vivid for me for a woman from Coshocton County that I had the opportunity to visit there. I've also been to Scioto County and interviewed women that were in residential treatment there.

11:03:17 But over my career, I've talked and conducted focus

groups and been involved with many individuals that have opioid use disorder and are in treatment in various locations.

Q And as a result of those conversations, have you reached a conclusion as to the extent to which opioid use disorder in mothers exists in this country or in the state of Ohio?

A Well, because those would be anecdotal conversations, it provides the context, it provides their experience. The mother in Coshocton in particular whose husband had an industrial accident and started on prescription drugs and, you know, in a very short time period, as she said she had been able to get into recovery when her children were removed and participate in the family treatment court in that county, that she was doing well. But, unfortunately, her child's father had not done well, and it had been a very bad situation for their family. And that's been, as we know, repeated time and time again.

So anecdotally, it provides that context, that flavor. When I was here in Cleveland to provide testimony to Senator Portman and Senator Brown, there was a gentleman who lost his son to an opioid overdose who began using after having his wisdom teeth extracted. So those kinds of situations that I am extremely well aware of.

But probably, you know, maybe because it's my age and

I'm a grandma, the grandparents who are devastated by both the loss of their child who has the opioid use disorder or devastated by the death of their child who are now raising their children, the federal government has just started a new technical assistance center specifically for grandparents and kin who are raising their children.

This is sort of unheard of in our country, to have so many families impacted that the federal government said we need a technical assistance center just for grandparents who are raising their children -- their grandchildren now.

Q Dr. Young, you were asked about government funding, including funding through the recent rescue plan, the passage of the recent rescue plan, and H.R. 133.

Do you know how much of that has gone into Lake or Trumbull County?

A No, I don't.

Q Do you know how long it will last?

A Until it's spent and it will be gone. There will be no long-term resources available to Lake and Trumbull or to the rest of the country.

Could I follow up on that? Because I think there's a key piece of this about, you know, the impact of funds that were made available.

Because the substance abuse treatment prevention field has been unfunded and inadequately funded for so long, that

we don't have the infrastructure in communities to spend that money right away. It sounds like, oh, great, Congress put money into this, you know, I like to say the taxpayers put money into it, and it went unspent. No. They're still building the infrastructure.

It takes trained professionals. It takes getting people on the ground to implement these programs. It's not something that you can turn on a dime and get one allocation and say we solved the problem. It is a long-term need and it is a long-term solution just to build the infrastructure of human resources that we need to implement these programs.

Q Is it your belief that the national monies that we've talked -- that you were asked about are a drop in the bucket in terms of what is needed to deal with the substance abuse problem, the opioid abuse problem in this country and its effect on families and children?

A It's a small amount compared to the need. And I think that's evidenced by individuals that I did speak to that's in Lake and Trumbull that still talk about not being able to meet the demand.

And remember when we talked about that you have to be able to engage with parents the day that they've delivered the baby? They have to be able to -- workers have to be able to intervene with parents the day their child is removed. Those kinds of resources take infrastructure over

a longer period of time to build those programs, to train the staff, to provide the expertise that's needed. And the reason why you have to do it then is about what that means of the -- really, the magic of recovery and providing that hope as that individual parent is devastated by the loss of their child.

So that immediacy can't be understated about what's needed in communities.

Q You were asked by one of the defense lawyers whether or not you had looked at treatment data from the counties.

Do you recall that?

A Yes, I do.

Q The -- is it your experience that statistics about treatment severely result in undercounting of the number of people that are actually suffering from opioid use disorder in this country?

A Oh, yes. That's -- that's well established in the literature for as long as I can remember.

There is a very big difference between need for treatment and making a demand on treatment. So you and I may have, you know, Uncle Bob or someone in our family who we all recognize has a problem. We -- this person needs treatment. We recognize that person needs treatment.

But converting Uncle Bob from need to treatment to actually seeking treatment is a very big step. And a lot

of, unfortunately, damage and adverse consequences may be evident in his life and the life of his family while we're trying to get those resources in place to ensure that he's able or she is able to get into treatment at that point when they have the treatment that's made available.

So the lag between need for treatment, demand for treatment, enter treatment, there are lag periods there, and I believe it's our job to close that gap.

Q And that's part of the reason for the need to develop infrastructure. And we're not just talking about building. We're talking about people who can be trained to reach out to individuals and counsel them or their families into treatment, right?

A Exactly. It is -- it is both the infrastructure, which has been underfunded for a very long time, but, importantly, the personnel, the staff, the trained professionals that are needed to be able to meet people, provide that hope that they need, and the engagement in services for them.

Q And that's across a broad range of county departments. It's not just social workers. It's law enforcement, it's a wide range of departments that are affected by that and need to develop, we'll use the word infrastructure, to get over that hurdle, right?

A Correct. Individuals -- you know, the reason why that

framework looks so complex is because individuals seek services in lots of different places.

The police encounter, the, you know, car accidents, emergency rooms, the criminal justice system, the child welfare system, they all have been impacted by this increased number of individuals who have opioid use disorders and opioid misuse that are creating consequences in our communities.

MR. WEINBERGER: Thank you, Dr. Young.

Nothing further, Your Honor.

THE COURT: Okay. Any further recross?

MS. HACKER: No additional recross from Walgreens, Your Honor.

I did just have one housekeeping item for the record.

I believe I misidentified one of the demonstratives we looked at with Dr. Young, this slide that refers to Dr. Young's estimates of pregnant women who use prescription opioids.

I referred to it on the record as PT77. It is actually CT3-2, demo 2, from the plaintiffs, and it was page 14.

MR. WEINBERGER: We agree with that, Your Honor.

THE COURT: Okay.

MR. HYNES: Very short recross, Your Honor.

THE COURT: Okay.

RECROSS-EXAMINATION OF NANCY YOUNG

BY MR. HYNES:

Q Hi, Dr. Young. This will be really quick.

11:13:17 Mr. Weinberger just asked you some questions about funding.

A Yes. That's correct.

Q Okay. You have not evaluated the funding of existing programs for families and children in the counties, have

11:13:32 you?

A I did not look at budgets for those programs, but we identify various programs that we have been involved with in Ohio and in Trumbull County. But not to look at their specific funding, that is correct.

11:13:51 **Q** You couldn't say what their funding is sitting here today?

A Not off the top of my head. I'd be surprised if anybody could.

Q Right. And it's also not in your report?

11:14:00 **A** The funding that has gone specific to the allocation from the state to the counties is not in my report, correct.

Q You don't have any opinions about the existing funding of the programs in the counties?

A No, I wouldn't agree with that. I have opinions about

11:14:18 the existing funding I believe I just talked about.

Q But they're not based on the actual funding that the county agencies and departments have been receiving?

A It's not the specific dollars that the taxpayers have made available to those counties. It's not the specific dollars. But the adequacy and the ability to convert need to demand to access, I do have opinions about.

Q Right. But it's not based on the funds that the agencies and departments have received in the past or are receiving today?

A That is correct.

MR. HYNES: Thank you.

MR. MAJORAS: Nothing from Walmart, Your Honor.

THE COURT: Okay. Thank you very much, Dr. Young.

You may step down.

THE WITNESS: Thank you very much.

MR. LANIER: Your Honor, the next witness is going to be Caleb Alexander. And I know you have not asked for paper copies but wanted electronic copies of everything.

There are these two massive charts that are going to be so much easier to follow, I suspect, if you've got paper copies, so I've got them for you, just in case.

THE COURT: Thank you.

MR. LANIER: Dr. Alexander, we have your

reports and your charts. Do you want those?

THE WITNESS: Those would be great.

MR. LANIER: I just want to grab these reports for him, please.

11:16:21 THE COURT: Good morning, Doctor.

THE WITNESS: Good morning.

THE COURT: Could you please raise your right hand for me.

(G. CALEB ALEXANDER, sworn)

11:16:31 THE COURT: Thank you very much.

DIRECT EXAMINATION OF G. CALEB ALEXANDER

BY MR. LANIER:

Q Dr. Alexander, welcome back to the stand in this trial.

11:16:38 **A** Thank you very much.

Q As I suspect you understand, we are in the remedy phase, having already concluded the jury liability phase. This phase is being tried simply in front of His Honor, so I'll be asking my questions, ask you to direct your answers

11:16:54 to the Court. And, of course, as always, he will tell us if we are astray or if he's got additional questions I'm not smart enough to ask.

Okay?

A Yes.

11:17:07 **Q** All right. I have a roadmap for you. We want to make

a thorough record here, but we want to do so as briefly as possible, recognizing that the Court can read your report and probably has read a good bit of it, if not all of it, already.

11:17:24 Okay?

A Yes.

Q But we still want to put certain things on the record, and so we're going to do that with three different stops along the way. We are going to talk about your

11:17:32 qualifications, then we'll talk about your opinions and bases for those, and then what I'm calling complaints. And by that I simply mean some of the issues where we believe the other side complains about the work you have done.

Okay?

11:17:50 **A** Yes.

Q So let's start with qualifications.

Now, you did testify during phase I of this case, fair?

A Yes.

11:17:59 **Q** And during that phase, in your testimony, we went through your curriculum vitae, your CV, also fair?

A Yes, we did.

MR. LANIER: Your Honor, we've got it marked in this phase as Plaintiffs' Exhibit 4899. We will be

11:18:18 moving it into evidence or attempting to later as you deal

with those things at the end of the day.

BY MR. LANIER:

Q But for practical purposes, as a reminder to the Court and to make sure we've got it on the record, are you still a medical doctor?

A Yes.

Q Are you still an epidemiologist?

A Yes, I am.

Q And do you teach both medicine and epidemiology?

A Yes, I do.

Q And as a doctor, what kind of medicine do you practice?

A I'm a practicing general internist, so general medicine for adults.

Q And how is it that you came to be someone with such a thorough expertise in matters like opioid use disorder?

A Well, I've been interested in understanding the genesis of the opioid epidemic as well as how to best abate it for many years, and so, I've made it one of the foci of my academic scholarship.

Q And in that regard, have you gotten grants and foundational funding for work on this area?

A Yes, I have.

Q And have you published, I would say innumerable, but let's just say hundreds of articles, many of which are

relevant to this subject?

A Yes, I have.

Q And if you were to just put into your own words your qualifications that make you a preeminent expert about talking about how to go about solving these problems, how would you put your expertise on the record?

MR. DELINSKY: Objection, Your Honor. Leading.

THE COURT: Overruled.

THE WITNESS: I'd characterize myself, I'm a practicing internist. I'm a pharmaco-epidemiologist, a professor of epidemiology. I spent a significant amount of my 20-plus year career in academic medicine working to understand the genesis of the opioid epidemic as well as the value of varied programs and services and interventions that might best abate further harms.

BY MR. LANIER:

Q Is this something you just got into because we hired you in this case, or is this something where you have quite a reputation already?

A I've been interested in this for years, far prior to my first engagement with litigation, which may have occurred in 2017 or so.

Q All right. In that regard, then, let's move down the road from your qualifications and let's talk about your

opinions and the bases for those opinions.

THE COURT: Mr. Lanier, what exhibit did you reference was the CV? Because I didn't see that. Maybe I misheard it or I didn't see it on the chart.

11:21:20 MR. LANIER: I'm sorry, Your Honor.

Plaintiffs' Exhibit 4899.

THE COURT: Okay. I didn't see that on the index, so --

MR. LANIER: Then I may have messed up in the

11:21:28 index, and if so, we will rectify that. I'm sure as you and I are having this dialogue right now, people are fast and furious making sure that our index is proper.

Did you pass up a copy? Okay. Thank you.

BY MR. LANIER:

11:21:55 **Q** And Mr. -- Dr. Alexander, excuse me, did you prepare a report that is an abatement plan for addressing the opioid crisis in Lake County and Trumbull County?

A Yes, I did.

Q And did you issue that report April 16th of 2021?

11:22:17 **A** Yes, I did.

Q We have marked your report Plaintiffs' Exhibit 23100, and we'll be seeking to admit that later, but for our purposes right now, what I'd like to do is walk through those opinions you've got specifically with regard to the

11:22:41 spreadsheets that you did and attached as appendices.

Okay?

A Yes. That's fine.

Q All right. So here's the way -- I'm trying to figure out how to do this as quickly as possible and not be redundant.

So give the judge kind of an overall synopsis of how you went about putting together an abatement plan so the judge has a framework for understanding the appendices we'll work from.

A Of course. And I'll try to answer briefly two different ways.

First is to speak to the broad scientific approach, which was to examine the foundational literature, the literature that speaks to the matters at hand. Also to combine this with reviewing a number of materials that were generated by the counties themselves. And to review data arising from both federal and state sources to supplement data that may have been available that was county specific and generated at the county level.

And I combined this with my conversations with local experts on the ground, such as April Caraway and Lauren Thorp and Kim Fraser. And I also consulted with a team and with professional colleagues who are themselves experts in varied matters that are relevant to the matters at end.

And this is done in an iterative fashion, so it's

not -- it's not a linear fashion where you never look back. Rather, it's an iterative fashion, where I look at the data, I look at the peer-reviewed literature, I speak with experts, I consult with colleagues, and iteratively develop the plan.

11:24:29

To answer the second way: The plan itself is focused on a variety, perhaps 15 or 20 different categories of programs, programs or services. And each of these categories is I believe important for a comprehensive and coordinated abatement plan in each county.

11:24:50

The categories themselves are similar or identical across the counties, but the magnitude, the volume of services and programs are quite different, because the counties are different in terms of their population, the morbidity and mortality from the opioid epidemic, and the like.

11:25:08

Q All right. So if we take your two ways, first the plan where you examine the literature, you examine the data, you dialogue with local experts, that's part of the methodology of how you put your plan together?

11:25:25

A Yes. And -- yes. And that includes consultation with colleagues and professional experts as well.

MR. DELINSKY: Your Honor, I just want to make it clear on the record that when we're talking about experts in the context of these drawings, it's not -- it's a

11:25:41

colloquial word, not a court-approved Rule 702 admitted expert.

MR. LANIER: And I'll stipulate to that, Your Honor.

11:25:54 THE COURT: It's people that Dr. Alexander considers source of expertise.

MR. LANIER: Exactly.

THE COURT: Okay. So you can -- I mean, you can certainly cross-examine him, Mr. Delinsky, on who these

11:26:05 folks are.

MR. LANIER: Thank you, Judge.

BY MR. LANIER:

Q And then, you've put together a plan, and the plan itself you have divided up into four categories; is that

11:26:20 right?

A Yes.

Q And so that we've got those categories for His Honor, would you walk through them for us.

Category 1.

11:26:34 **A** Yes. Category 1 is prevention, which is focusing on reducing opioid oversupply and improving safe opioid use.

Q All right. So in total, we can just call it prevention.

Category 2 would be what?

11:26:52 **A** Category 2 is treatment, which is focused on

supporting individuals affected by the epidemic.

Q And so, you will give His Honor a -- in each of these categories, you will be providing the care that needs to be done over an extended period of time to best abate the opioid epidemic in each of these two counties; is that fair?

A Yes, it is.

Q And then you've got Category 3 for your plan. And what is in Category 3?

A Category 3 is focused on recovery and enhancing public safety and reintegration.

Q And then your final category is Category 4. What would you give that as a global describer?

A Well, Category 4 is focused on the needs of special populations, such as youth, adolescents, pregnant women, neonates, and the like. So these are special populations of particular concern.

Q And so His Honor's got an ability, as he not only reads through your report but reads through the appendices to your report, which we'll tender into evidence, he's got an ability to see what you believe to be the necessary elements to help prevent, Category 1; the necessary elements to help treat, Category 2; the necessary elements to help aid recovery, Category 3; and the special elements necessary to abate in special population areas.

You'll have those in buckets for His Honor, fair?

A Yes. That's correct.

Q All right. In that regard, what I'd like to do is take next Plaintiffs' Exhibit 23105A. And this is one of your spreadsheets. And in this, I'd like to be able to look at the spreadsheet information you've given His Honor for Lake County's opioid abatement estimates.

Do you see where I've got this in front of us, your worksheet?

A Yes, I do.

Q All right. We'll keep this out and we'll go through this so that the Judge has an understanding and a framework of what your testimony has been as we look through each of these categories in the plan.

First, I need to ask you this question: The information that you have put into Plaintiffs' 23105A and 23105B, which is this same form of a document simply for Trumbull County instead of Lake, right?

A Yes. That's right. The same framework.

Q All right. So within that framework, have the figures and the opinions and the material that you've put into these spreadsheets been based upon what is reasonably probable under the medical and scientific expertise that you have?

A Yes. I've done my best to identify the most relevant scientific information and to estimate the magnitude of programs and services that are needed within any category or

subcategory.

Q All right. Now, you told me that you've got one math issue on these charts, and we'll get to that, because you want to make sure His Honor is aware of that math issue; is that correct?

A Yes. That's right.

Q Okay. Don't let me fail to do that. But with the exception of that math issue, do you stand by these figures and these abatement plans that you have put together as being reasonable to abate the opioid epidemic in Lake and Trumbull Counties?

A Yes. I think they're not only reasonable but important.

Q Explain why you say that.

A Well, because the morbidity and the mortality in the counties continues to accrue. And my review of materials that have been provided to me, as well as discussions with local experts on the ground, as well as the opportunity to review abatement progress or lack thereof in jurisdictions around the country, underscores to me that this is a problem that can be addressed and needs to be addressed urgently. And, you know, I was just -- so that's why.

Q All right. So let's start with Category 1, prevention.

And you've got a number of different -- well, if we

look at the front page, it's kinds of an index for these abatement categories.

Prevention, your goal here is to reduce opioid oversupply and to improve safe opioid use.

11:32:13 Is that correct?

A Yes, it is.

Q And then you break this down into a number of different areas.

First you have health professional education.

11:32:24 Can you explain what you're doing there.

A Well, the focus of health professional education is to be sure that prescribers are in tune with and using the best evidence possible as they're undertaking -- as they're treating individuals that may have pain. Also to improve

11:32:44 their ability to identify and manage patients that have opioid addiction.

Q In this regard, we had some alarming testimony, to me at least, from a *Morbidity and Mortality Weekly Report* of July 17th, 2020, that was used by the defense in the last

11:33:13 witness, and it talked about, with a chart, the number of pregnant women who have been given opioids by prescribing doctors. It was table 2.

Are you familiar with the idea that doctors are actually prescribing opioids to pregnant women?

11:33:40 **A** Well, I'm not shocked by it, but I certainly am

concerned.

Q That 91.3 percent of the opioid use among pregnant women came from a health care provider source, often the OB/GYN, sometimes the family doctor or primary care doctor, sometimes a dentist, sometimes an emergency room doctor.

Are you seeking funds to help educate the health care -- no -- are you suggesting funds to help educate the health care system to address issues like this?

A Yes, I am.

Q Now, by the same token, Ms. Young was also asked about a slide that she had that indicated pregnant women with OUD effects. And in that slide, she talked about the report we just looked at that 6.6 percent of women reported using prescription opioids during pregnancy.

Obviously, not a reference to 6.6 having OUD but to using prescription opioids.

Do you see that?

A Yes, I do.

Q When you figure out in your chart what percent of women that are pregnant that have OUD, do you use the figure like 6.6 users or do you use a different figure?

A No. I use a different methodology. I don't use the number of women receiving opioids, although, that's of concern. But that's not the strategy that I -- that I undertake.

Q All right. So under prevention, we've got health professional education.

We've got patient and public education. Can you explain what that is and why it's important.

11:35:39 **A** Well, I mean, this is vital. There are widespread misconceptions about the nature and optimal management of chronic pain as well as the management of opioid addiction among the general public as well as patients. There's also widespread stigma, of course, that's vital to be addressed.

11:36:01 So patient and public education is designed to help shift public opinion and help to lead to a greater informed public and patient population that will understand that addiction is just not -- it's not just a matter of bad choices, that nobody wishes to have addiction any more so

11:36:18 than they wish to have colon cancer, and that it's treatable, that there's safe and effective FDA-approved medicines to treat it.

This category is also important to educate individuals about how to best safely store and dispose of opioids, which

11:36:34 we'll come to in the next -- next category. But it's vital that the public and patients be educated regarding safe storage and drug disposal.

Q All right. So on patient and public education, take the first prong of what you spoke about, the education and

11:36:50 stigma prong.

If there is evidence that some people just don't want to get treatment, are those people who need to be educated?

A Well, I mean, we certainly can't accept the status quo. And the fact that many people are not interested in treatment is a part of the problem. It's not a part of the solution.

So -- so that needs to be front and center in terms of working to be sure that any inclination to decline treatment isn't a function of lack of awareness about the fact that treatment works, that there is a better path, that there are millions of people living happy, healthy, successful lives in recovery. And we need to be sure that we're investing in the treatment infrastructure as well, which we'll come to shortly.

Q All right. So you give, obviously, printouts and read-outs and great detailed data on each of these points where I could take a week and go through your chart, but we'll be putting your chart into evidence and so we don't take a week to do it.

But I want to go to the next item under prevention.

Community prevention and resiliency.

Can you explain what that covers.

A Absolutely.

Well, if you think of prevention, prevention can happen on an individual level, reaching out to patients or

providers or other affected parties, but prevention can also happen at a community level. And particularly in hard-hit communities, the fabric of the community has been frayed by the opioid epidemic. In other words, there's not the community safety net that communities that have been less severely affected have.

And so, this category of services and programs is designed to implement evidence-based interventions, such as providing community spaces, instituting peer or mentorship programs and the like, that help to undertake prevention at a community level.

Q All right. The next category -- the next subdivision of Category 1, prevention, is harm reduction.

Can you give the Court an understanding of what you have categorized as harm reduction.

A Well, the best example of harm reduction are syringe service programs, although, I also propose other types of services. And these don't just make good public health sense — and there's an overwhelming amount of information to support their public health value — they make good economic sense.

Harm reduction is a pathway to treatment, so while there are individuals that may be -- participate in syringe programs, for example, that are not engaging in treatment, it is a pathway for many individuals to ultimately enter the

treatment system.

Q The *Wall Street Journal* today reported that for the first time, U.S. drug overdose I think deaths exceeded a hundred thousand based in part or largely on the fentanyl increase and all that's come about.

Do you provide things like fentanyl testing strips and things like that under your harm reduction category?

A I do. I do.

Q Then the final subdivision of Category 1, prevention, is surveillance, evaluation, and leadership.

Can you explain what that is and why that's important.

A Well, it's vital that resources that may arise from any source, whether a settlement or a judgment or another source, are properly shepherded and stewarded, and so this -- and it's also vital that interventions are made and iteratively evaluated and so that measures are tracked and so that we know what programs are working, what programs may have fulfilled their objectives, where resources should be reallocated.

So this is no less important than the other categories that I include here, and it provides for staffing for abatement coordination.

Q In other words, can you just solve this problem by taking a bunch of money and pouring it out into the county, just fly a plane over and dump a bunch of money into the

county? Will that do it?

A No, it will not.

Q Even the programs themselves, do you have to have an infrastructure and very clear responsibilities for people who are skilled and able and driven take jobs to oversee programs and implementation of whatever His Honor does to help abate this epidemic?

11:41:41

A Yes. That's vitally important.

Q All right. Let's move then from Category 1, prevention, to Category 2, which is treatment.

11:42:00

And within the framework of that, have you given His Honor what you consider to be a proper treatment proposal for each of the two counties?

A Yes, I have.

Q And that treatment proposal starts out with one subsection of connecting individuals to care.

11:42:18

Can you explain what you've done there.

A Well, it's not an accident that it's first, Your Honor. And the reason that I include it is because many people don't access care because of the gaps that occur in our typically fragmented health care system. And so, this includes interventions such as a help line, the provision of peer recovery coaches, transportation assistance, quick response teams, which are teams that go out and reach people that have recently overdosed in an effort to outreach to

11:42:39

11:43:02

them and to work to get them into treatment, as well as bridge programs that can be established in emergency departments and that allow for a warm handoff so that a 35-year-old woman that comes in that recently overdosed isn't just given a phone number to call and sent back home or sent back to the streets once she's discharged.

Q Now, in this regard, I want to go and dig a little deeper. And so, I'm still on 23105A, which is Lake County, but I've pulled up the actual spreadsheet where you connect individuals to care that you're talking about, the 2A, treatment. And you specify these areas that you just said to His Honor, the help line, peer recovery coaches, transportation assistance, quick response teams, and the bridge programs.

Is that fair to say, you break those out?

A Yes.

Q And you've done that with all the other categories that we've been talking about or will talk about, you break them out with what you perceive to be the need; is that right?

A Yes.

Q And you do that on -- for year-by-year-by-year basis starting with, from your report, 2021, though that's past now. But you can just move these years successively into the future, is that fair?

A Well, I do it for 15 years, so that's true, it's a 15-year plan, and it -- you know, a shift would require some consideration of the data inputs and other matters. But, yes, I think for -- for illustrative purposes, yes, this could be imagined shifted one year.

Q All right. Well, do you -- in the process for His Honor as he works through this and for the appellate record, we've got in brackets here on the screen, where you've put bracket one under help line, bracket two under peer recovery coaches, brackets three, four, five, six, seven under transportation assistance, eight through 12, quick response teams, 13 and 14, bridge programs.

Do you see those bracketed numbers?

A Yes, I do.

Q And His Honor is able to go to the next sheet. And in those bracketed numbers, do you provide not only what the bracket applies to but the source from which you are deriving your opinion and your information?

A Yes, I do.

Q So, for example, when you have number of full-time equivalent help line staff at three, you have three 8-hour shifts so that there's a 24-7 hotline coverage by a licensed clinical social worker level staff and/or crisis intervention specialist that's informed by substance abuse and mental health services admin and the national help line.

Is that fair?

A Yes.

Q Okay. And so, you can then -- the judge has the ability and the appellate court has an ability to check all of your figures to see where they are sourced and why you have given the input that you do, true?

A Yes.

Q And then, also at the end of each of these sections, you have what you call cost description, right?

A Yes. For most -- for most of the 20 categories within these four, you know, for most of the 20 subcategories within these four overarching categories, there are costs that are provided as well.

Q And you've done and cited those where you've got a citation for the costs, like the bridge program costs per emergency department, you give sources for those as well, true?

A That's correct.

Q And so, that information, an economist like Dr. Rosen or Dr. Burke would be able to take your data and put it into total numbers, fair?

A Yes.

Q All right. We did a deep dive there under 2A, but we could do that same deep dive, and His Honor will be able to, the appellate record will have, for all of the categories

and subcategories you've got, true?

A Yes. That's right.

Q And we'll look at maybe some more in a moment, but 2B, talk about treatment for opioid use disorder, please. What is that?

A Well, that focuses on the direct provision of care for people with opioid addiction. I already noted that we have safe and effective treatments. They can reduce mortality by as much as 50 percent, which is a mortality reduction that, you know, clinicians from many different fields would love to have for the various conditions that they manage.

And this category is focused on providing treatment across different levels of care using a framework provided by the American Society of Addiction Medicine.

Q All right. I'm going to interrupt you, Dr. Alexander, and just once more, for illustrative purposes, and to have on the record, I want to go to -- do a deeper dive to your spreadsheets where you talk about treatment for opioid use disorder, which would be on page 15 of Plaintiffs' Exhibit 23105A.

The ASAM levels of care for OUD treatment, do you see that?

A Yes, I do.

Q Now, the ASAM you said stands for the what?

A American Society of Addiction Medicine.

Q Is that like a fly-by-night organization or is this something with credibility?

A It's -- it's not a fly-by-night organization. It's a professional society of addiction specialists around the country.

Q They're the go-to people for this, aren't they?

A I think it's the best -- as I've always done, I use the best source of information that I was able to find for the purpose at hand. And I felt that for this purpose, ASAM was a very good framework to use.

Q All right. And then you dig down and you start out by talking about the total number of individuals with opioid use disorder. For 2021, you have 5,668. That's bracketed with bracket number one.

Do you see that?

A Yes, I do.

Q And so, bracket number one, we're able to look at the next spreadsheet, the number of individuals with OUD in Lake County. Input: 5,934. Your source: 2019 data, past 12 months, opioid use disorder, estimate provided by Dr. Katherine Keyes.

Is this where you used her numbers that His Honor heard about yesterday?

A Yes, it is.

Q Now, why, when she gives the number 5,934, do you have

the number 5,668?

A Because I trend down the need for services over time in order to account for what I estimate to be an improving situation on the ground over time, and I do so by applying a -- what I call a trend ratio, which is depicted as input 24.

And in some sense, I take a conservative approach, because in year one, I already apply a modest reduction in the level of services and programs. And so I apply this trend ratio of 0.96, so essentially I take 96 percent of the estimate that Dr. Keyes provided.

Q All right. And then, over time, do you continue to trend down the number of individuals with OUD and the proportion of those who will be receiving treatment?

A Well, I trend down the total number of individuals with opioid use disorder using that trend ratio.

And I can discuss, if Your Honor is interested, how I derive that trend ratio.

I trend up the proportion of individuals receiving treatment over time, so that's input two. And whereas in year one, I believe that we can achieve and should achieve 40 percent of individuals receiving treatment. By the end of the 15 years, I estimate and believe that we can achieve 60 percent receiving treatment that have opioid use disorder.

Q And is that in part because of the education, both patient and public education, that you have talked about under the prevention tab?

A It's a function of many different -- many of these categories ultimately will help to feed the pipeline of individuals entering treatment, so connecting individuals to care, LEAD programs that are a part of public safety initiatives, drug courts that are a part of the criminal justice system. These are like 3A, like apple, and 3B, like boy, though there are many different components of the abatement plan that will allow for an increase in the proportion of people with addiction receiving a treatment over time.

Q And by the same token, I talked about the American --

THE COURT: And I assume, Doctor, that also would contribute to the reduction in the people who need the treatment if those methods are successful?

THE WITNESS: That's absolutely the case, Your Honor, and that is -- I take that into account in applying the trend ratio. In other words, by year 15, I estimate that the morbidity and mortality associated with the epidemic can be halved in the communities, and so, there will be lower need for treatment, in part, because more people will have been successfully treated.

BY MR. LANIER:

Q That's great.

Have you broken out this treatment -- and by the way, you've got at the bottom of each of these charts your abbreviations explaining it, so there will be no doubt about that as well.

But as we look through this, are you able to also specify, for example, the proportion of individuals to receive MAT, or medications for addiction treatment, and then break out those medications of what they may receive, and have you gone to great detail here for the Court?

A I -- yes, I have apportioned individuals across different types of medications, for example. And as with all of the other inputs, I've provided the source of information that I use to derive the estimates that I've provided to the Court.

Q And by the same token, do you also give the total number of different types of professionals that would be needed, whether the number of psychiatrists, psychiatrist nurses, addiction counselors, peer review coaches or peer navigators, program assistants, social workers, do you provide all of that in an annualized basis?

A I do. In this instance, for what you just displayed, this is for the subset of individuals with opioid use disorder that I believe should be eligible and receive assertive community treatment, which are individuals with

highly complex, comorbid illness that will benefit from the greater intensity that the ACT program allows.

Q Can you give me a practical everyday example of what that means for someone to be highly complex, comorbidity illnessed?

11:55:37

A Yes. This would include an individual that might have, for example, severe mental illness as well as opioid use disorder, so an individual that has poorly controlled bipolar affective disorder or what colloquially is called manic depression, may also have opioid addiction, could also have HIV or could also have poorly controlled cardiovascular disease, and might have insecure housing and may not be gainfully employed. And so, it's this type of individual that will benefit from the greater intensity of services that are afforded by the assertive community treatment model.

11:55:54

11:56:16

Q All right. As we continue through Category 2 and the treatment need, 2C, managing complications attributable to the epidemic.

What type of groups are you talking about? What type of abatement work are you talking about here?

11:56:33

A Well, here, I'm focused on a fairly narrow subset, just three conditions, but three important ones: HIV, hepatitis C, and endocarditis.

So the first two are chronic infectious diseases, both

11:56:54

of which can be treated, and hep C can be cured. And endocarditis is a bacterial infection of the valves of the heart.

And to be clear, I'm estimating here the needs for treatment for individuals that I believe have these as a function of the opioid epidemic. So I'm not suggesting just treat anybody with hep C in the community, but, rather, I've estimated and provided the sources of information I used to estimate the -- essentially the attributable population of individuals with addiction that have hepatitis C, for example.

Q And, again, with all of these categories, just to be clear, you give in bracketed numbers your references for how you derive the numbers that you are giving to His Honor; is that fair?

A Yes.

Q If you look at Category 2D, workforce expansion and resiliency.

Can you explain the abatement need you're addressing there.

A Well, Your Honor, my conversation with individuals on the ground in these counties and elsewhere makes it clear that workforce issues are a big deal, a major deal. And partly the challenge is being able to recruit top talent and take care of them and to make the jobs jobs that people want

to have, where they're well remunerated and where they are working in settings that are tolerable long-term.

There's also a toll that's taken on people that are caring for people with addiction. And some of the programs that I advise here and that are typically part of abatement plans can be thought of as caring for the carers, in other words, providing care for those that are delivering care. So I'm talking about programs that address burnout and compassion fatigue.

I also include in this category expansion of the number of addiction treatment providers, medical social workers, and pain treatment specialists.

Q And we typically take a lunch break, but before we do --

THE COURT: We may go to 12:15 because of both the continuity of this and my schedule.

MR. LANIER: Thank you, Judge.

THE COURT: Around 12:15 we'll pick a convenient stop.

MR. LANIER: That will be great. Thank you, Your Honor.

BY MR. LANIER:

Q 2E, distributing naloxone and providing training.

Why is this a necessary part of treatment abatement in the counties?

A Well, naloxone is a safe and effective opioid reversal agent, and it can give people a second chance.

So I suggest a variety of different channels within this subcategory, if you will, to distribute naloxone, four to be specific. So one is to first responders, the second is through emergency departments, the third is for high-risk patients, such as patients that are on chronic high-dose opioids, and the last is through public lockboxes, no different than we have for cardiac defibrillators.

12:00:25 **Q** Ooh, that's great.

And if we work through the spreadsheets, that explains the needs in Category 2 for treatment.

Let's go to Category 3 and try to get it out before the lunch break as well.

12:00:41 Recovery. You have explained that as enhancing public safety and reintegration, and you start with the subcategory of public safety.

What do you believe to be important abatement programs related to public safety?

12:01:03 **A** Well, comprehensive abatement has to consider the role of public safety. And in this -- in this category, I consider things such as law enforcement assisted diversion that allows for nonviolent offenders that fulfill certain criteria to be eligible for treatment and to be channelled 12:01:24 through the treatment system, rather than through the legal

system.

Also, I think it's important to support opioid investigators, individuals within police departments and public safety programs that can investigate and disrupt and 12:01:40 dismantle fentanyl trafficking and other counterfeit opioid trafficking networks.

And stigma reduction training is also important; in other words, to be sure that law enforcement officers are educated, just as the general public and just as patients 12:01:58 and their loved ones are, regarding the nature of addiction and the fact that -- and the optimal management of chronic pain.

Q One of the things that impressed me -- that's irrelevant, what impressed me.

12:02:09 One of the things I'd like to highlight in what you've done here, and tell me if I understand it right, is that a lot of these things that you're suggesting really don't take that much money, they're almost a rounding error in what's being done, but you've included them anyway.

12:02:28 Why is that?

A Well, I'm not focused on the economics. I have always been asked and had as my North Star the science and the epidemiology. So, you know, I don't have precise estimates or ideas, frankly, about the relative costs of these 12:02:51 different categories.

But I can tell you that if you look at abatement programs around the country, Your Honor, these sorts of -- the sorts of programs and services that I'm suggesting here are remarkably consistent in looking at different abatement programs and different -- different policy statements about how -- what needs to be done to address the opioid epidemic.

Q All right. In that regard, your next subcategory in Category 3 is the criminal justice system. Sensitive to this Court, I'm sure, because just about every day His Honor has not only our trial, but he's got a criminal docket that he deals with as well.

What is it in the criminal justice system that you see is necessary to invest or work with to better abate this problem?

A Well, there's -- there's remarkable -- there are remarkably high rates of opioid use disorder among individuals intersecting with the criminal justice system. And if -- so there's a really important opportunity here, I think one of the biggest opportunities, frankly, in many communities around the country, which is to better integrate treatment within the criminal justice system.

Now, I leave the direct treatment to be subsumed in the treatment category that we've already discussed, so I don't separately enumerate that here, but issues such as -- and opportunities such as drug courts, reentry and

reintegration programs, and transitional housing for offenders who may be newly released that have opioid use disorder. These are vital steps in improving the care of individuals that may have addiction that intersect with the criminal justice system.

Q All right. And while you've got a number, for example, in Lake County, 54 for the year of 2021, you've got reentry costs per person at not a huge dollar amount. But to you, it's still an important thing to do; is that fair?

A Yes.

Q 3C, you speak about the need for vocational training, education, and job placement.

Please explain what you believe to be important there.

A Well, again, many individuals with opioid use disorder have -- are unemployed or underemployed, and gainful employment is an important process allowing for individuals to get a foothold and to put their lives back together.

So vocational training is a major opportunity, as is -- as are other interventions such as recovery oriented workplaces that are designed to better facilitate individuals who may be in recovery, reentering the workforce, rather than screening them out and saying, eh, you've got a felony or you have addiction or you've been in treatment and, you know, we can't take you.

Q If we go back to the exhibit that was used by the

defendants, pulling from the report of Dr. Young, the MMWR CDC's report from July 17, 2020, the table that you and I looked at before, in that table, it talked about the women responding to this questionnaire or whatever it was, said the reasons for prescription opioid use, other than pain, was 14 percent for a lot of them it was to relax or to relieve tension or stress, help with feelings and emotions.

Is that related, for example, to the need to have a job? In other words, if you don't get these addicts a job after you treat them, are they more likely to relapse?

A Well, I think there are -- I'm sorry. Can you ask the question again, please?

Q Yeah. I'm just asking: Is it important to get them a job?

Why is it important to train people to find a job when they're in recovery?

A Well, employment -- again, underemployment or unemployment is one of the factors, the social factors that drives and perpetuates cycles of addiction. And so, vocational training is important because giving people who are in early recovery or in active treatment, giving them an income and a source of sustenance is important for their well-being and will improve the likelihood of their successfully staying in treatment.

Q All right. Category 3D, to conclude recovery, you've

got mental health counseling and grief support.

Can you explain why that is important as well and what you've done there.

A For far too long, often pain has been treated as if there's one tool in the toolbox. And, in fact, there are many tools in the toolbox, and there's a whole set of tools that are nonpharmacologic in nature; in other words, things like psychological counseling.

And so, this category includes both the need for psychological counseling, for greater staffing so that we can deliver psychological counseling to many individuals that have chronic pain, but it also importantly includes the provision of grief support for individuals who may be bereaved because they've lost a loved one from opioid addiction. And it includes the provision of mental health counselors to provide such counseling and grief support.

Q All right. Having made it through Category 3 now, let's look at your last category that you have, which are the special populations.

And you've put that as Category 4, fair?

A Yes.

Q All right. You start with pregnant women, new mothers, and infants. This is what His Honor has already heard testimony about, this special category, from Dr. Young today.

I want to talk to you about in general, first, about what you've done here, and then I need to ask you a specific question about what we've heard thus far.

Go ahead.

12:09:30 **A** Yeah, so this is a special population and includes intervention such as prenatal screening of pregnant women for opioid use disorder, prenatal and postpartum psychological or psychosocial services, housing services for those that need it who are new mothers with opioid

12:09:49 addiction, and interventions for infants exposed to opioids in utero. And this includes interventions at the time of delivery and in the perinatal period, but for some children, they will require interventions during childhood as well.

Q All right. There was a suggestion in

12:10:08 cross-examination, based upon the demonstrative charts used with Dr. Young, that perhaps you were using the idea that 6.6 percent of women were actually -- of pregnant women actually had OUD. And it was pointed out that the article says that 6.6 percent of women reported using prescription

12:10:36 opioids.

So my question to you is: Did you wrongly use 6.6 percent of pregnant women as having OUD?

A I didn't use that number in order to derive the total number of pregnant women with OUD, which is depicted as

12:10:57 input two. And I describe the methodology that I use lower

in the spreadsheet. But, no, I did not use that figure.

Q All right. So, for example, just at first blush if we look at it, you have the number of pregnant women eligible to receive universal prenatal screening at 2,192 for Lake County in the year 2021, right?

12:11:20

A Yes.

Q But the total number of pregnant women sure isn't 6.6 percent of that. You've got it down as just 32, correct?

12:11:32

A Correct.

Q I mean, that's, what, 1.5 percent or something like that, in that range, fair? Or am I doing bad math?

A I didn't use the 6 figure, and I would want to use the calculator.

12:11:51

Q All right. Challenged me on that one. I'll be close or off.

All right. You give your formula, though, for the Court so that the Court can determine how to -- how you have given this where you looked at the number of hospital live births, the prevalence of OUD per 1,000 hospital deliveries, based upon an average number of women who were diagnosed with it at delivery, et cetera, Ohio Department of Health.

12:12:06

You give all of your data, don't you?

A Yes, I do.

Q All right. And then 4B, adolescents and young adults,

12:12:22

explain what that is.

A Adolescents and young adults are another vulnerable population. Their brains are, you know, rapidly developing, as is their maturity, and they're at high risk for being exposed to nonmedical opioid use and/or worse. So this category is focused on deploying school-based prevention programs as well as screening individuals, and it also supports these activities by employing school social workers to a greater degree than have been used thus far or resourced thus far within the counties.

Q When we have this abatement plan in place, and it's working the way you hope and we all hope it would, does that mean that the schools will see an improvement not just with those students but with -- will that rising tide lift all of the boats, hopefully, and we'll have better peace in schools and we'll have better students in schools and a better learning environment and help the whole community?

MR. DELINSKY: Objection, Your Honor. Calls for speculation. Calls for predicting the future.

MR. LANIER: Should it?

THE COURT: That's -- I think that's what everyone's trying to do. If you want to ask him why he included 4B --

BY MR. LANIER:

Q Why did you include 4B? Why did you include 4B?

A I included it because adolescents and young adults are a vulnerable population that have been hard hit by the opioid epidemic. And by investing in these individuals, we can improve their immediate circumstances as well as improve the broader community of which they're a part.

Q 4C, can you tell His Honor and the record what you've put in there and why?

A 4C focuses on another special population, families and children, and includes the support for children living with parents that have opioid use disorder, support for children in foster care, and support for children that may be adopted and their families.

Q And then 4D, homeless and housing insecure individuals, explain, please.

A 4D is the relationship between housing -- homelessness or housing insecurity and addiction is bidirectional, and you can't take someone with addiction and offer them treatment and expect that they're going to get better living under a bus shelter.

So this category of services is focused on taking the subset of individuals that, by my best scientific estimates, I believe are homeless and have opioid use disorder and providing them with a permanent supportive housing.

This isn't just giving them a key and a roof. This is giving them a shelter, but also the services and the

programs that they need to be successful in recovery, Your Honor. So it includes the provision of case management, if needed, peer recovery coaches, and the like.

Q And then, final, 4E, that is nothing in your chart because you're saying that individuals with opioids misuse have all been assumed in these other categories, so you don't want to be duplicative, fair?

A Yes. Subsumed in these other categories.

Q Subsumed. Thank you.

And the last question in regards to this exhibit: I've been quizzing you and using as an example Plaintiffs' 23105A, which is Lake County. But did you go through all of those same categories using specific data that you deem most relevant for Trumbull County as well?

A Yes, I did.

MR. LANIER: And that, Your Honor, we have marked as Plaintiffs' Exhibit 23105B, which we'll also submit.

And, Your Honor, that brings us to the end of opinions and bases, and it's a good time to break before complaints.

THE COURT: Okay. Thank you.

We will break until 1:15.

Have a good lunch, and then we'll pick up with the balance of Dr. Alexander's testimony.

(Recess taken at 12:16 p.m.)

A F T E R N O O N S E S S I O N

- - -

(Court resumed at 1:27 p.m.)

THE COURT: I apologize. My sentencing took a little longer than expected.

So, Doctor, you're still under oath from this morning.

And, Mr. Lanier, you may continue.

MR. WEINBERGER: Your Honor, before we continue, in the interest of efficiency, both for the Court and for counsel, at this point, plaintiffs move to enter -- to be admitted into evidence the two spreadsheets, Exhibits 23105A and 23105B.

THE COURT: Is there any objection?

MR. DELINSKY: We object, Your Honor.

THE COURT: What's the objection?

MR. DELINSKY: Same grounds as with the expert reports. It's an out-of-court statement. It is -- it is a component of an expert report. It's in --

THE COURT: Well, it's now an in-court statement. He's testified to it. There's no way --

MR. DELINSKY: Your Honor, if I could be heard, Your Honor. If I could be heard, Your Honor.

Judge Faber in West Virginia was faced with the same issue. He kept these -- he kept the redress models out.

THE COURT: Well, I'm admitting them. Okay?

If you want to brief it, brief it. I mean, there's no way a court of appeals could understand this without having those tables, Mr. Delinsky, all right? I couldn't, you couldn't, and no court could.

13:29:03 MR. DELINSKY: Well, Your Honor, what's happened --

THE COURT: You want to brief it, fine. It's in.

MR. LANIER: All right. Ready to go.

13:29:09 THE COURT: Let's move on.

BY MR. LANIER:

Q All right. Dr. Alexander, last stop on the road: Complaints.

Mr. Hynes and I have drawn up a complaint chart here 13:29:25 for you to work through. I want to talk about just a couple of the complaint items that I know of.

First and foremost is your own complaint. You said there's a math error, and I said we'd just fix it on the stand instead of redoing all of the charts.

13:29:45 Can you tell the Court what math error it is so that we can make sure we put that on the record.

A Yes.

Q Which page? Just tell me which page to put up and we'll do it.

13:30:02 **A** It is 4C, like Charlie.

Q Math error is 4C, as in Charlie.

And is this on both Lake and Trumbull County?

A Yes.

Q All right. Then what I'm going to do is go to 4C, families and children, as to Plaintiffs' Exhibit 23105A, which is Lake County, which is what we had been dealing with. 4C is on page 36 -- no, 37 of the spreadsheet. I'll put it up here.

Please tell me how to direct the attention to the math error.

A If you could scroll down, please, to the description of input one.

Q All right.

A That's fine.

So input one, in describing the source of information that I used here, I wrote that an estimated 57,500 children were residing in a household with a parent with OUD in Ohio in 2017. If you -- the value 1,197, which is the input, reflects the product of 2.1 percent by 57,000 instead of 57,500.

In other words -- I'm sorry, let me just come back. And after that sentence, if you could just highlight the next sentence which is: This estimate was multiplied by 2.1 percent.

So, essentially, I'm suggesting that I took 57,500 and

multiplied it by 2.1 percent. And, in fact, what I erroneously did was I took 57,000 and multiplied by 2.1 percent.

So, essentially, I reduced the estimated population of children residing in a household with a parent with OUD in Ohio, I inadvertently reduced that number by 500 individuals. And so, the value that I provide is ever so slightly smaller than what I believe to be the scientifically true value.

13:32:28 **Q** So your math was, instead of multiplying the 57,000 children times the average opioid overdose deaths of 2.1 percent, instead of multiplying that out properly, you typed in to your calculator 57,000.

So those extra 500 children residing in a household at 13:32:57 2.1 percent would have equalled another ten people, in essence?

A Yes.

Q So your input is low compared to what it would have been at 1,207, correct?

13:33:16 **A** Yes.

Q In other words, that's one that's to the detriment of the counties, it's not one that is an overestimate for the counties, right?

A That's true.

13:33:31 **Q** And, in other words, you didn't make a mistake that

inures to our benefit, you made a mistake that inures to our deficit, right?

A Yes. I believe that's true.

Q All right. Do we need to make the same correction in the Trumbull County?

A Yes, we do.

Q So, in Trumbull County, if we look on 4C, which is found on page 37 of Plaintiffs' Exhibit 23105B, number of children living with parents of OUD, you've got that same issue of 57,500. But here your estimate was multiplied by 2.5 percent because of Trumbull County; is that right?

A Yes.

Q All right. And so, the ultimate calculation you had of 1,425 is, again, down, I guess this is by 11 people instead of 10. So the correct math would be 1,436 children instead of 1,425, fair?

A Yes.

I haven't done that calculation, but that looks right to me.

Q Okay. Now, that's one complaint.

I want to look at other possible complaints that have been raised. Specifically, Dr. Kessler raises a question about 1E.

Are you familiar with that complaint?

A If you could remind me, that would be helpful.

Q Frankly, I may just leave it for him. 1E is the harm reduction under prevention. I'm going to leave it for him in the interest of time. This gives me something to cross him over.

13:35:45 Next, can you explain the difference between bed capacity and whether or not an individual is in it for a full year?

A Yes. I estimate treatment needs for the counties based on a model that works to project what the capacity

13:36:19 needs will be in each community. And in doing so, I use treatment slots; in other words, slots that may be occupied by a given individual in treatment.

But my model is not predicated on any requirement that a particular individual be in treatment for any particular

13:36:40 length of time.

With that being said, I do want to say that treatment we know often is far too short, that the American Society of Addiction Medicine underscores that treatment less than 90 days is seldom adequate, that many individuals will

13:36:57 require treatment for a year or longer, and that the length and that the likelihood of success of recovery, the longer one is in treatment on average, the better the recovery. And so, there's an overwhelming amount of evidence to support those assertions.

13:37:14 But, again, I do not -- my model isn't predicated on

requiring any particular member of the county to be in treatment for any particular length of time.

Q All right. Two more issues to cover here under complaints.

13:37:30 One is the usage --

THE COURT: Let me ask --

MR. LANIER: Go ahead.

THE COURT: I'm quite familiar with this from my work. All right? I agree, based on my experience, less 13:37:42 than 90 -- less than 90 days is seldom effective. Some people need -- I've never had anyone a year, a constant year, but some people need to go back again or for different types of treatment.

But how did you -- well, if we go to section three, 13:38:03 whatever, when you computed the number of people with -- section two, number of people with OUD, and then -- how you calculated the length of -- the length of treatment needed, the cost, how did you do that?

I mean, I see you've got a certain number of people 13:38:26 and then a certain percentage ranging from 40 to 60 percent to get treated, so you've got a number of people to achieve treatment.

What did you put for days, costs? Or average days or costs?

13:38:41 THE WITNESS: Well, if I could -- thank you

for the question, Your Honor. And if I could separate the cost matter and first just address how I -- how I estimated the treatment needs in terms of treatment slots.

Essentially, I took the 40 percent of the total 13:38:56 population of 7,221 and -- which is the population that I believe should be eligible for treatment --

MR. WEINBERGER: You're in Trumbull right now? You're looking at Trumbull, right?

THE WITNESS: I'm sorry. Thank you.

13:39:13 **BY MR. LANIER:**

Q Go to Lake County.

A Yeah, thank you.

So I took the 5,668 individuals in Lake County, estimated that -- that have opioid use disorder and 13:39:24 estimated that 40 percent of them would be eligible for treatment in the first year.

THE COURT: Right.

THE WITNESS: And of that population, I then apportion them across different levels of care. Some in -- 13:39:39 if you look at rows nine through 12, some in outpatient settings, in intensive outpatient, in rehab/residential, and in inpatient settings.

And for those, essentially, I estimate as treatment slots, so I'm not predicating a particular length of 13:39:59 treatment. What I'm arguing is that in year one, there

should be 388 occupied treatment slots in the outpatient setting, and that may be -- you know, there may be several people that --

THE COURT: How did you get those particular numbers, nine, ten, 11, and 12, your estimates for, you know, you need 388 of the 2,267 in outpatient and 171 of the 2,267 in inpatient?

THE WITNESS: So I use a distribution from a federal data source, the Treatment Episode Data Set, or TEDS, that looks at the distribution of treatment admissions across different levels of care.

So it allows for me to understand of everybody in treatment, about what proportion are being admitted in varied care settings. And so, that 57 percent, the 25.1 percent, the 12 percent, and the 5.9 percent are derived from this federal dataset that provides information on -- of everybody receiving treatment, how many fall into these four different bins.

THE COURT: Okay. Thank you.

BY MR. LANIER:

Q And if we wanted to find that, we could look at the bracketed nine, ten, 11, and 12, and you will give your sources, so the appellate court would be able to look at that additionally and see that for each of your citations; is that fair?

A That's correct.

And then, the costs are provided secondarily, and these are derived -- and the sources for these are also provided, but these are derived from estimates from -- from Ohio Medicaid programs. And this is the cost of treatment for individuals at these varied levels of care.

And then I also provide what are called the NADAC, or National Average Drug Acquisition Cost, which reflect the costs of pharmacologic treatment for these conditions.

13:42:08 **Q** And so, on page 17, for example, in the Lake exhibit, 23105A, you've got at the end of these cost descriptions suggested costs using the ASAM levels. And you give it for each category, explaining what year the dollars are in, nine hours of treatment per week, excluding medication or 13:42:35 whatever it may be, 12 hours' treatment per week. And you continue to do that with all of the categories, including residential treatment, inpatient treatment, OUD treatment drug costs for the various different types of medicines that would need to be used. You give all of that data as well 13:42:58 for the economist to compute tomorrow?

A Yes, I do.

Q Thank you.

And then, the last area of -- well, let me do it this way.

13:43:17 First, I want to also mark that I will tender later

the supplemental report that you have done. It's very brief. But it's marked as Plaintiffs' Exhibit 4999, and it's basically just two short paragraphs.

The one with substance is the second paragraph, and in that, you have said that you have extensively researched the harms associated with the oversupply of prescription opioids. In one investigation, my colleagues and I modeled the trajectory of the opioid epidemic to evaluate the relationship between opioid prescribing, opioid use disorder, and fatal overdose in the United States.

Is this a recent peer-reviewed article that you published?

A Yes, it is.

Q You footnote it as number one, and the footnote shows this as being in *Addiction* journal in 2022.

This is in the last couple of months?

A Yes. Yeah. I mean, it may have been released electronically prior to that, but if it was, my guess is it was still, you know, within 2021.

Q Effect of reductions in opioid prescribing on opioid use disorder and fatal overdose in the U.S.

Is this part of the modelling that you have used, or is this fresh since the production of your report? In other words, does this change anything?

A Well, I mean, this reflects the results of the

analyses that were included in this manuscript, and it's relevant to this case because it demonstrates that the harms that accrue from prescription opioid oversupply don't just happen the day that the oversupply happens. And just analogously with tobacco, if you imagine everybody in, you know, Trumbull County quitting smoking tomorrow, we wouldn't see many of the gains, the salutary gains from that, for months and years and years. And that's exactly what we found and empirically demonstrated in this report.

13:45:10

13:45:28

Q Hence the enduring negative impact of prescription opioids on opioid-related harms, including fatal overdose and OUD?

A Correct.

Q All right. And then, the last thing we have to talk about, in terms of your testimony, is the NSDUH. The Court heard about this. It was on the record yesterday, why Kerry Keyes, Dr. Keyes did not use the NSDUH. She was specifically shown an article where you used it in modelling.

13:45:43

13:46:06

Would you tell the Court your expert opinion on whether or not the NSDUH figure would be appropriate for you to use in your expert capacity in this case as you model abatement.

A Well, data isn't good or bad, right or wrong. Data has to be applied in a fit-for-purpose fashion.

13:46:28

The NSDUH is a valuable resource, and it can be applied well to answer important questions relevant to the public health and the matters at hand, and it can also be misapplied and used in highly inappropriate ways.

13:46:46 So I don't know if that answers your question, but I would say that the NSDUH, the value of a dataset, just like a hammer, isn't an inherent function of the data per se. It's how that tool is applied to answer a scientific question.

13:47:05 **Q** So then my question becomes this: If it's to be applied in a fit-for-purpose fashion, did you use it here?

A Yes. There are some instances where I use information from the National Survey on Drug Use and Health in these models.

13:47:22 **Q** Did you use it to estimate the number of people with OUD in the counties?

A No, I did not.

Q Why did you not use it for OUD?

A Well, it undercounts the proportion of individuals

13:47:39 with opioid use disorder. And I had reviewed and was familiar with the approach used by Professor Keyes. I had examined that approach as well as a number of other approaches, and I felt that her approach was much more suitable as a means to estimate the number of individuals in

13:47:59 Lake and Trumbull County with opioid use disorder.

Q All right. Well, with that, sir, we have come to the end of the road.

MR. LANIER: So I'll pass the witness, Your Honor.

13:48:11 THE COURT: Okay.

MR. DELINSKY: Your Honor, it will just take me a minute to set up.

And while I do that, Your Honor, could I just make a clarifying point?

13:48:24 I don't mean to relitigate your ruling on the admissibility of the redress models, but, Your Honor, I believe we'll all be on the same page on this, that the footnoted material in the redress models do not come in for the truth of the matter asserted, they come in exclusively

13:48:43 as the basis for Dr. Alexander's estimates.

THE COURT: Well, right. It's not hearsay. It's for -- I mean, he could go through, Mr. Delinsky, line by line, but he's not. He's gone through the summary in his testimony. He's explained what he did. He's explained the

13:49:04 basis, which is in all the footnotes and the backup. And his testimony is going to be unintelligible for me, for cross-examination, for anyone in posthearing briefs, and for the Court of Appeals unless these tables are admitted.

So they're admitted for -- because they demonstrate

13:49:27 what he said and the basis for his testimony.

MR. LANIER: Thank you, Judge --

THE COURT: They're not -- you're correct. Whether -- they're not there for the truth of the matter asserted, it's there for his opinion and the basis for it. And, you know, people can argue whether his opinions are worthy of belief or not or whether he's made mathematical errors or not or whether the sources he used are the most accurate or not or whether his assumptions are accurate or not, but the document -- the only way this hearing can be intelligible is if his work product is admitted for what it is. It's his work product.

Okay. And we can do the same thing for the work product of any of the defendants' experts. If they come in with a -- with we'll call it an abatement plan, with charts and backup showing what they did, their calculations, the sources they used, the assumptions, and they put it in a table, I'll admit it exactly the same way.

Okay.

MR. DELINSKY: May I proceed, Your Honor?

THE COURT: Yes.

CROSS-EXAMINATION OF G. CALEB ALEXANDER

BY MR. DELINSKY:

Q Good afternoon, Dr. Alexander.

My name is Eric Delinsky. I represent CVS. I probably live 50 miles from you in Washington, D.C., so

we're sort of neighbors?

But we haven't met before, correct?

A Correct.

Q Okay. I want to start with your plan and its breadth.

13:51:03 Your plan is comprehensive, correct?

A Yes. I believe so. Yes.

Q And to use your words from a deposition I believe you gave in this case, it's a soup-to-nuts plan?

A Yes.

13:51:22 **Q** Your plan proposes measures that would address addiction to prescription opioids, correct?

A Yes, it does.

Q Your plan proposes measures to address the misuse of prescription opioids, correct?

13:51:42 **A** Yes.

Q There are persons who may misuse or be addicted to prescription opioids who never obtained them from CVS, Walgreens, or Walmart, correct?

A Yes.

13:51:57 **Q** Your plan would encompass these persons, it would encompass treatment for these persons who never filled prescriptions for a prescription opioid at CVS, Walmart, or Walgreens, correct?

A Yes, it would.

13:52:13 **Q** Your plan proposes measures that would address

addiction to and misuse of illegal opioids, like heroin and illicit fentanyl, correct?

A Yes.

Q Heroin and illicit fentanyl pose massive problems and cause enormous harms, correct?

A Yes, they do.

Q People don't obtain heroin and illicit fentanyl from CVS, Walgreens, and Walmart, correct?

A That's correct.

Q They obtain them from drug dealers?

A Well, they may obtain it from -- from a number of illicit sources, but not from -- not from pharmacies.

Q Your plan would encompass, however, addiction to and the misuse of these illegal opioids?

A Yes. I think any abatement plan worth its salt has to address the opioid epidemic, and there's just one opioid epidemic that includes both the use of prescription opioids as well as illicit opioids. And many illicit opioid users, of course, previously used prescription opioids.

Q And I believe you've testified that you wouldn't even know how to prepare an abatement plan that differentiated between users of prescription opioids and users of illegal opioids, correct?

A Well, I don't -- I've -- again, I think that any abatement plan has to tackle the opioid epidemic, so it

would be helpful to be reminded, you know, of what I may have said previously, but I think that it's hard to imagine a plan that would, you know, treat a young teen differently because they happen to overdose and come to the emergency department with their most recent drug of use being heroin, for example, rather than oxycodone.

Q Some parts of your plan, like syringe service programs, SSPs, or needle exchanges, only pertain to the use of illegal drugs, correct?

A Well, we know that many users of these programs may also use prescription opioids concomitantly and use them nonmedically.

As I noted, the harm reduction programs, like syringe service programs, aren't just about giving people syringes. They're also about giving people a ladder or a bridge to help connect them to treatment.

Q So let me ask the question again.

A syringe service program, a needle exchange, provides needles for users of heroin, correct?

A Yes.

Q And your plan encompasses polysubstance use, correct?

A Well, I've designed a plan to abate the opioid epidemic, but I do note in my report and would be happy to elaborate on the importance of these efforts being coordinated with simultaneous activities in the counties to

address the problems associated with the use of other substances.

Q Okay. And today, there is an increasing problem of the use of other substances, like illegal stimulants, along with illegal opioids, correct?

13:55:47

A Stimulants are -- many individuals have stimulant use disorder or are using stimulants nonmedically, and many of these individuals may be using prescription opioids nonmedically or they may be using illicit opioids nonmedically.

13:56:04

Q Okay. So you can have people -- so you talked about prescription stimulants, but people are using cocaine with illegal opioids today, correct?

A Yes.

Q And your plan would provide assistance to them, correct?

13:56:15

A Insofar as they're using opioids, my plan would focus on helping them to access evidence-based treatment for opioid use or opioid use disorder.

Q People abuse illegal methamphetamines with illegal opioids today, correct?

13:56:31

A Some do, yes.

Q And your plan would reach them?

A Again, insofar as they are actively experiencing sequela related to the opioid epidemic, my plan would enable

13:56:48

them to access, hopefully in an unfettered manner, services and programs to help them speed their recovery.

Q Your plan proposes to reeducate and retrain doctors, correct?

13:57:07 **A** Yes, it does.

Q Your plan proposes addiction treatment -- excuse me, I already asked you that.

Your plan provides for treatment for pain, correct?

A My plan works to improve the management of chronic

13:57:30 pain so as to reduce our historic overreliance on opioids, yes.

Q Okay. So it proposes resources for health care workers to treat patients with pain, correct?

A Yes.

13:57:50 **Q** Your plan proposes inpatient treatment to treat people suffering from opioid addiction, correct?

A For a small subset that require such treatment, yes. There are individuals that have -- for example, an individual that has active endocarditis is at risk of

13:58:12 imminent death, and so, they require intravenous antibiotics, they may require valve surgery. And if they have active opioid use disorder, that should be treated simultaneously.

Q Your plan proposes outpatient treatment for people

13:58:28 suffering from opioid addiction?

A Yes. That's true.

Q Your plan provides for medication-assisted treatment for people suffering from opioid addiction?

A Correct.

13:58:42 **Q** Your plan would provide for treatment for addiction to illegal opioids, like heroin, just as it does for addiction to prescription opioids?

A Well, I've spoken about these being part and parcel of the same problem. And, you know, there are individuals 13:59:01 using heroin that started with prescription opioids, and, frankly, there are individuals using heroin that may not have even used a prescription opioid before but wouldn't have started with the heroin but for the opioid epidemic and the oversupply of prescription opioids.

13:59:17 So I think that as with other abatement plans that I've carefully reviewed, they're all highly consistent in tackling the opioid epidemic, which includes people using illicit opioids.

Q So your plan would treat somebody suffering from 13:59:32 addiction to heroin the same as it would treat someone suffering from an addiction to a prescription opioid?

A Well, they may need different types of services, but my plan would enable either of them to have unfettered access to what I hope would be high quality, comprehensive, 13:59:53 and coordinated care for their opioid addiction, yes.

Q Your plan would provide the same quality of personalized care for someone abusing heroin as it would for someone suffering from addiction to a prescription opioid even though the specific elements of the care may look different, correct?

14:00:12

A Yes.

Q Your plan provides for special intensive treatment for people with co-occurring mental health conditions, correct?

A Yes, it does, for the small subset that has such comorbid illness which can significantly complicate their treatment and recovery from opioid use disorder.

14:00:27

Q And that includes people, and I think you used the example this morning, suffering from bipolar disorder as one example, correct?

A Yes.

14:00:40

Q Your plan provides for special intensive treatment for people suffering from other challenges such as homelessness, correct?

A I'm sorry. Can you ask the question again, please.

Q Your plan provides for special intensive treatment for people suffering from other challenges, like homelessness?

14:00:53

A Yes, it does.

Q Okay. And I believe you testified this morning, and your report discusses it, assertive community treatment programs are what your plan proposes to provide special

14:01:10

intensive treatment, correct?

A Yes.

Q Okay. And these assertive community treatment programs -- and the abbreviation is ACT, correct?

14:01:24 **A** Yes.

Q These ACT programs would be composed of interdisciplinary teams, each one of which would be comprised of a psychiatrist, two psychiatric nurses, two employment specialists, two substance use disorder experts, 14:01:44 administrative staff, and social workers, correct?

A Well, I'm not sure that that's correct. I would want to look at the detailed model. But what I can say is people with those sorts of -- people from those disciplines and with that sort of experience should be individuals involved 14:02:01 in the care of these patients.

So -- but I didn't mean to suggest that, you know, every single patient visit, for example, is managed by a team of, you know, eight or ten different providers of the variety that you suggested.

14:02:17 **Q** Okay. Could you please -- do you have your report up there?

A Yes, I do.

Q Could you please turn to your report at page 38. And tell me when you're there.

14:02:32 **A** Yes. I'm here.

Q Okay. And if you could look at paragraph 114. I'm going to put this up on the ELMO. It has all my highlighting so you can see what else I think was interesting in your report. And I'm going to put a box around the portion I want you to look at.

This is a paragraph that deals with assertive community treatment or ACT, correct?

A Yes.

Q And you state in your report: Through this model, an interdisciplinary team with a psychiatrist, two psychiatric nurses, two employment specialists, two SUD specialists, a peer recovery coach, an administrative program staff, and social workers or other master's or doctoral level professionals will compose the ACT team, correct?

A Well, here, I would want to cross reference this with the redress model to know if I specifically called for that intensity of service. But I think those are the sorts of disciplines that I believe are important to be included in this treatment team.

Q Your plan provides for drug treatment programs -- excuse me -- provides for drug disposal programs, correct?

A Yes, it does.

Q That includes drug take-back and the drug disposal pouches, right?

A Yes. At a minimum, I believe I crossed out the

take-back programs. I'm not sure I cost out the pouches, which would be an example where I was perhaps more conservative.

Q Your plan calls for community prevention and resiliency programs, correct?

A Yes. That's true.

Q And these are programs that seek to strengthen social bonds and promote healthy behaviors, correct?

A Yes.

Q Your plan, we've already discussed this a little bit, provides for syringe services programs, right?

A Yes, it would.

Q And those are free needle programs, correct?

A Well, they -- they consist of a lot more than just giving people needles. They consist of providing a bridge to treatment for individuals that may be hard to reach or it may have substantial misconceptions of what treatment entails or how likely it is to be successful or how much it costs and the like. So it's a lot more than just giving people needles.

Q Your proposed abatement plan provides for fentanyl testing strips, correct?

A Yes.

Q These testing strips can be used to detect whether an illegal drug is laced with illicit fentanyl, correct?

A Yes, or whether counterfeit pills, which have caused a lot harm as well, contain fentanyl.

Q Your plan proposes that fentanyl testing strips be distributed to all individuals that use illicit substances in the communities, correct?

14:05:32

A Yes, I believe through the syringe service program model or outreach.

Q Your abatement plan provides for drug checking machines, correct?

14:05:44

A Yes.

Q These drug checking machines chemically analyze illegal drugs or counterfeit pills to determine if they are laced with illegal fentanyl or another dangerous substance, correct?

14:05:58

A Yes.

Q Okay. And I believe you state in your report that the use of drug checking machines in the United States has been limited, to date, to raves and party centers, correct?

A Well, and I think some law enforcement, you know,

14:06:16

settings have also used them.

Q Okay. Your abatement plan provides for 24-hour help lines, correct?

A Yes.

Q And these help lines would be available for anyone

14:06:28

suffering from a substance use disorder, correct?

A Or others that are impacted by the opioid epidemic. I mean, so they would be available to help -- help provide immediate and useful information and access to individuals that need help and need a number to call.

14:06:46 **Q** And it would be -- they would be available to users of opioids and their loved ones, correct?

A Yes.

Q And it would be available to users of other substances and their loved ones, correct?

14:07:00 **A** Well, it's not -- it's not designed for that. I mean, I don't -- I mean, I suppose anybody could call the line, but the line is intended to support and address one of many gaps in care that's been particularly important in contributing to the high rates of harm that we continue to

14:07:21 see in the counties to this day from opioids.

Q Your plan provides for peer recovery coaches, correct?

A Yes.

Q It provides for medical social workers, correct?

A Yes, it does.

14:07:32 **Q** And medical social workers address the psychosocial needs of an individual such as housing and transportation, correct?

A Yes. These can be important components of care that help people to stay in treatment and engage in successful

14:07:49 recovery.

Q Your plan provides for transportation assistance, correct?

A Yes. Again, another gap that my discussions with experts on the ground and my review of information from community health improvement plans from the counties, as well as information from around the country, has underscored is really important, that is the transportation gap.

Q And if you just put it in plain terms, your plan provides assistance for people who may be receiving outpatient treatment but can't get to the facility, correct?

A Correct.

Q Your plan provides for teams of first responders, addiction counselors, and peer recovery coaches to provide guidance to persons who have recently overdosed, correct?

A Yes. Another huge opportunity and currently one where lots of people fall through the cracks.

Q And those are called quick response teams, correct?

A Yes. Or sometimes I believe "DART" is also used. That may be "drug abuse response team" or something to that effect.

Q Your plan would provide treatment for HIV to the extent that the HIV patient is suffering from an opioid addiction, correct?

A Not -- not exactly. It would provide treatment for individuals that I estimate have HIV and would not have but

for the opioid epidemic.

Q It would provide for treatment for persons suffering from hepatitis C, subject to the exact same qualification you just made?

14:09:20 **A** Correct.

Q It would provide treatment for persons suffering from endocarditis, again, subject to the same qualification you made?

A Correct.

14:09:32 **Q** Your plan would provide funding to expand the health care workforce, correct?

A Yes, insofar as this is important in improving the opportunities of the county to address the opioid epidemic.

Q So it would provide funding to expand the number of

14:09:52 providers who provide medication-assisted treatment, correct?

A Yes. That's right.

Q It would expand the number of medical providers who can treat pain, correct?

14:10:02 **A** Yes.

Q It would -- it would include medical social workers, along the lines of what we already discussed, right?

A Yes. That's true.

Q Your plan would provide funding to address compassion

14:10:17 fatigue and burnout within the health care workforce,

correct?

A Yes. Attributable to the opioid epidemic.

Q And I believe that you wrote that compassion fatigue and burnout have resulted in decreased empathy in the health care workforce, correct?

A Well, yes. But also as I mentioned, it's also resulted in people not being interested in working in this field. The people that I have spoken with that are running treatment programs have underscored that it's really hard for the people that are working there because -- as I said, because of the low remuneration and because of the caseloads and because of the environments in which they're working. And so, all of these have to be addressed if the counties are to successfully expand treatment.

Q Your plan would expand the -- excuse me, Dr. Alexander.

Your plan would expand the availability of naloxone, which is the overdose reversal drug, correct?

A Yes. That's true.

Q And the utility of that one speaks for itself, correct?

A Yes.

Q Okay. Your plan would provide training to reduce the stigma of opioid addiction that's held in law enforcement, correct?

A Yes. As well as to educate regarding the treatability of the disease.

Q Your plan would provide for the creation or expansion, depending on the circumstances, of pretrial diversion programs, correct?

14:11:38

A Yes. That's true.

Q Your plan would provide for specialized opioid units in police departments to investigate higher level illicit opioid trafficking, correct?

14:11:51

A Yes.

Q Your plan would expand the capacity of the courts in the counties to accommodate more drug court proceedings, correct?

A Yes.

14:12:04

Q And your plan would ensure there's a sufficient number of court dockets, support staff, and case managers, correct?

A That's right.

Q Your plan would assist individuals released from prison, correct?

14:12:17

A The subset that have opioid use disorder and that need such assistance, absolutely. We know that the risks of dying upon release for someone with opioid addiction are incredibly high. It's an incredibly vulnerable period, and so it's vital that those people have services and programs

14:12:35

to help them have a smooth three-point landing once they're

released.

Q So for that population, your plan would provide for reentry programs, correct?

A Yes.

14:12:48 **Q** It would provide for housing, correct?

A For the subset that need it that have opioid use disorder and are at risk of, you know, living at a bus stop, if that's the alternative, yes, it would.

Q And your plan would provide job training for this

14:13:00 population, correct?

A Vocational training is important for this population. Yes, my plan would provide that.

Q Separate and apart from the prison reentry programs, your plan proposes funding for vocational training,

14:13:13 education, and job placement, correct?

A Yes.

Q And the goal is to promote economic development to make gainful employment readily available to individuals in the county with OUD or who have otherwise been impacted by

14:13:30 the opioid epidemic, correct?

A Yes.

Q And this includes job training, correct?

A Yes, it does.

Q It includes training on problem solving and coping

14:13:40 skills to help individuals respond to workplace stressors,

correct?

A Yes.

Q And your plan proposes initiatives to expand job opportunities, not just for individuals with OUD but for all residents of the communities, correct?

A Well, I may speak to the importance of that in my report, but I don't think I separately enumerate a line item for that initiative in my redress models.

THE COURT: Well, I just want to make sure either you understood the question or I did.

Your plan hasn't proposed vocational training and job placement for everyone in Lake County and Trumbull County, have you?

THE WITNESS: No, I have not.

THE COURT: I understood your plan to have those services for those individuals who have suffered from OUD.

THE WITNESS: That's correct.

THE COURT: All right. Well, that's what I understood it to be.

BY MR. DELINSKY:

Q All right. Dr. Alexander, I'm looking at page 52. Let's get this straight. This may very well be a misunderstanding on my part.

I'm looking at page 52 of your report, and I'm looking

at paragraph 164 --

THE COURT: This is the report and not the chart?

MR. DELINSKY: Correct, Your Honor.

BY MR. DELINSKY:

Q And I've placed a box -- I've handwrote a box around the sentence that states: Additionally, consideration should be given to expanding job opportunities for all residents of the communities to meet local needs created or worsened by the opioid epidemic.

14:15:32

Correct?

A Yes. That's correct.

Q Okay. And again, this may be my understanding. Is it your testimony that funding for this initiative, for all residents of the communities, were not included in your redress models?

14:15:46

A That's correct. There are select comments and recommendations that I make in the report that I don't translate directly into line items that I believe -- that I haven't attempted to enumerate.

14:16:05

And so, if you look at tab 3C of the redress model, for example, for Lake County, Exhibit 23105A, the vocational training, as -- Your Honor, as you suggested, is based on the number of individuals with opioid use disorder.

There may be other places in my report as well where I

14:16:27

speak to the value of something at large, but I don't -- I don't translate that into a specific line item in the redress models.

Q All right. I appreciate the explanation for that, and that goes down as my bad number one. And I would imagine by the end of our examination or discussion there will be a number more. So we'll mark that one.

Your plan provides funding for mental health counseling and grief support, obviously, correct?

A Yes.

Q And the goal of this remedy is to ensure that mental health services are available to all who may be in need within the communities related to the opioid epidemic, correct?

A Yes. I mean, specifically, individuals with chronic pain, because often we've treated chronic pain with one tool to great harm, and individuals that have lost loved ones or otherwise been directly impacted by the opioid epidemic.

Q It also includes people with mental illness, correct?

A Well, not just -- no. Not -- I mean, they could have mental illness, but it's not -- my suggestion is not that we ramp up, you know, psychiatric social workers to tackle depression or something like that. So they could have mental illness, but when I'm enumerating the needs within the community, it's always with a focus on individuals that

have opioid addiction or have otherwise been impacted by the opioid epidemic.

Q Okay. And that includes children, individuals with chronic pain, bereaved family members, correct?

14:18:01 **A** Yeah. For example, a seven-year-old girl who lost her mom from an overdose, I think she should be able to avail herself and her family should have access to the psychological services that they need.

Q And you set forth many reasons for the need for mental

14:18:17 health counseling and grief support, but one is you say it's necessary to prevent future opioid use, correct?

A Yes. Unfortunately, there is frequent intergenerational perpetuation of addiction.

Q You propose funding for children who have been

14:18:35 orphaned by the epidemic?

A Yes.

Q Children who have lost a parent, correct?

A Yes. That's true.

Q And children who have entered child protective

14:18:44 services or otherwise have come to the attention of child protective services in some way related to the opioid epidemic, correct?

A Yes.

Q Your plan proposes funding to address homelessness and

14:18:53 housing insecurity insofar as it's related to the opioid

epidemic, correct?

A Well, like closely related. In other words, individuals that have active opioid addiction and are homeless and housing insecure need to have stable housing if they're going to succeed in their treatment. And there's a strong bidirectional relationship here, so for that subset of individuals, I think that permanent support of housing is a valuable set of services.

Q And your plan would provide for housing for that population, for that subset of general population?

A Yes, it would.

Q Okay. Your -- let's talk about people. Your plan obviously reaches people suffering addiction to legal prescription opioids, correct?

A Yes.

Q It reaches people suffering from addiction to illegal opioids, correct?

A Yes.

Q I understand your views on the gateway, the gateway theory, but it does reach people suffering from addiction to illegal opioids who never have used prescription opioids, correct?

A Yes.

Q Your plan reaches people suffering from opioid misuse or opioid addiction who never filled prescriptions at CVS?

A Yes, it does.
Q At Walmart?
A Correct.
Q At Walgreens?
14:20:18 **A** Yes.
Q Your plan reaches people who are not addicted but, for the reasons you explained earlier, misuse illegal opioids, correct?
A I'm sorry. Can you ask the question again, please.
14:20:32 **Q** Your plan reaches people who may not be addicted but who misuse illegal opioids?
A Yes, it does.
Q Your plan reaches people who are not addicted but may misuse prescription opioids?
14:20:46 **A** Correct.
Q Your plan reaches people suffering from opioid misuse or addiction who have obtained prescription opioids through theft, correct?
A Yes. I mean, the plan is a comprehensive plan to
14:21:03 address the opioid epidemic in these two communities.
Q So it would reach -- it would reach persons suffering from opioid misuse or opioid addiction who bought prescription opioids on the street, correct?
A It -- yes, it would.
14:21:18 **Q** It would reach persons who bought -- took prescription

opioids out of a friend's medicine cabinet, correct?

A Yes, it would.

Q It would -- it would encompass people who obtained their prescription opioids from friends or family members, correct?

A It would. I mean, it would -- I didn't try to segment these individuals out. Whether or not they would access the plan, that's -- you know, hopefully many would be reached by the plan and touched by the plan and their lives improved by it.

Q Your plan reaches people who do not misuse opioids today but may in the future, correct?

A Yes. I mean, as I showed, for example, in the manuscript that we reviewed, there's a significant lag between when exposure at a population level happens to opioid oversupply and when the harms accrue. So, I mean, you could imagine someone that's not even born today that develops trouble down the road but that wouldn't have but for the oversupply of opioids in the community.

Q Okay. So I just want to -- let's just take a moment there, okay, and make sure we understand one another.

Your plan runs 15 years?

A Yes. That's true.

Q Okay. And even though the dates got a little screwed up due to the timing of your report and trial through no

fault of yours, it would in theory run from 2022 or 2023 through 2037 or 2038, correct?

A Yes.

Q Okay. And so, in theory, you could have a person who has never been exposed to opioids today, is exposed one way or another to an opioid for the first time in 2024, is suffering from opioid use disorder by 2027, and that person -- your plan would encompass that person, correct?

A Yes. I don't think the opioid epidemic can be abated in the communities without a plan that takes a comprehensive approach at -- at addressing the harms that would otherwise accrue.

Q Okay. So let's just get it straight.

Your plan may reach people who have never touched an opioid, prescription or illegal, as of today but may in the future and may develop OUD, correct?

A Yes. That's true.

Q Okay. And there are many different paths to addiction, correct?

A Yes.

Q Some involve filling prescriptions at a pharmacy, correct?

A Yes, they do.

Q Some don't?

A That's also true.

Q Some involve legal prescription opioids?

A Yes.

Q Some involve illegal opioids?

A Yes.

14:24:09 **Q** Some involve polysubstance use?

A Yes.

Q Your plan covers all of the different paths to opioid addiction?

A Yes, but focuses on the opioid epidemic, not other

14:24:22 substance use disorders.

Q Okay. Your plan not only reaches people suffering from opioid use disorder or opioid misuse, it focuses as well on their family members and loved ones, correct?

A Yes.

14:24:39 **Q** It reaches family members and loved ones of persons suffering from addiction to illegal opioids?

A Yes, insofar as, for example, if someone dies from an overdose, I think that their -- the family members should have access to counseling, for example.

14:24:56 **Q** Okay. And it reaches family members and loved ones of persons suffering from addiction to heroin who have not yet overdosed and hopefully won't, correct?

A Yes.

Q It will reach loved ones of persons who will develop

14:25:16 addiction in the future, correct?

A Yes.

Q It will reach the children of parents who will develop addiction in the future, correct?

A Yes.

14:25:24 **Q** It will reach the children of parents who will develop addiction to illegal drugs in the future, correct?

A Yes.

Q In theory, it could reach children not yet born, correct?

14:25:35 **A** Yes.

Q And, of course, we've already discussed that your plan would reach persons within the OUD population suffering from homelessness and housing insecurity, correct?

A Yes.

14:25:51 **Q** Okay. A goal of your plan -- a goal, okay? A goal of your plan is to ensure that no more children in the counties wake up without a parent from a fatal overdose, correct?

A Yes.

Q A goal of your plan is to ensure that middle school

14:26:11 and high school students do not run into trouble with opioids, correct?

A Yes. I mean, there are many, many benefits that you can imagine accruing from implementation of this kind of plan. The primary goal is to reduce further harms, reduce

14:26:30 overdoses, reduce rates of development of new addiction.

But these other -- these other potential hardships and tragedies, to the degree that they can be diverted, and I believe -- or prevented, and I believe that many of them can, then absolutely. My plan is designed to reduce those as well.

Q And a goal of your plan is to divert people from the criminal justice system to the treatment system, correct?

A Yes. That's true.

Q A goal of your plan is to reduce the pain and suffering and heartache that opioids have caused for so many individuals within Lake and Trumbull Counties?

A Yes. That's true.

Q A goal of your plan is to improve the lives of the citizens of Lake and Trumbull Counties, correct?

A Yes.

Q Okay. Your assignment was to draft a plan to abate the opioid epidemic in Lake and Trumbull County, correct?

A Yes.

Q And that's what you did?

A Yes.

Q Okay. Your plan is designed to abate the opioid epidemic in the two counties?

A Yes.

Q You prepared an abatement plan -- well, excuse me.

In your mind, and I believe you already testified to

this, there's only one opioid epidemic, correct?

A Well, I mean, I note that in response to queries about illicit heroin or -- I'm sorry, illicit opioids on the one hand and prescription opioids on the other -- and these two products are remarkably similar from a pharmacologic perspective. If you look at the organic chemistry and the chemical structure of the molecules, they're remarkably similar, and we shouldn't be surprised that they have the same or similar effects on the brain or the body.

14:28:18 And again, I've looked at a lot of abatement plans over time, and I've not seen one that said -- you know, that was predicated on a belief that we can address the opioid epidemic and then just step to, and we're just going to identify people that currently only have this type of opioid use disorder, and these are the ones we're going to treat.

Q Okay. So for those reasons, the plan that you drafted and that you've prepared and that you're proposing today is a plan that, as we've discussed, reaches both legal prescription opioids and illegal opioids, correct?

A Well, there's more than one reason. I mean, it's the morally right thing to do, it makes great sense from a public health perspective, it makes good economic sense.

If you look at the analyses that have been done on the returns on investment of treatment, for example, practically and sort of pragmatically, there's value to a plan.

So there are many reasons, not just one reason, that I believe that all abatement plans that I have seen, none of them have said we're just going to tackle this piece of the pie and not try to address this other piece of the pie. You simply can't do it. The plan won't work is the bottom line.

Q And your plan, therefore, addresses both, correct, illegal opioids and legal prescription opioids?

A For all of those reasons and perhaps others, if I were to think further, yes, that's why my plan addresses both.

Q Now, your assignment was not to determine if CVS, Walgreens, or Walmart caused the epidemic, correct?

A That's correct.

Q Your assignment was not to determine if CVS, Walgreens, or Walmart should bear any of the costs of abating the epidemic in the counties, correct?

A My -- that's correct. My assignment was to focus on the science and the public health and to serve the truth as best as I'm able.

Q Your assignment was not to determine what portion of abatement costs, if any, CVS, Walgreens, or Walmart should bear, correct?

A That's true.

Q Okay. Now, your plan sets out a framework to which you testified to abate the opioid epidemic, correct?

A Yes.

Q And I believe you taught all of us about the four general categories that comprise your abatement plan, correct?

A Yes.

14:30:40 **Q** Okay. And those categories -- let me just refresh my memory. Those categories were prevention, treatment, recovery, and special populations, correct?

A Yes.

Q And then, within each of those categories, there are

14:30:55 several subcategories, correct?

A That's correct.

Q Okay. And you've put forth a plan to abate the opioid epidemic in several other cases, several other opioids cases, correct?

14:31:06 **A** Yes.

Q You've proposed abatement plans in cases concerning other communities, correct?

A Yes.

Q That includes Rhode Island?

14:31:15 **A** Correct.

Q Washington State?

A Yes.

Q West Virginia?

A Yes.

14:31:21 **Q** City of San Francisco?

A Yes.

Q Okay. And you've proposed abatement plans in cases concerning other classes of defendants, correct?

A Yes, I have.

14:31:33 **Q** So you've proposed abatement plans in cases concerning only manufacturers, correct?

A Yes.

Q You've proposed opioid abatement plans in cases only concerning wholesale distributors like Cardinal and McKesson and AmerisourceBergen, correct?

14:31:50

A Yes.

Q And the plans that you have offered in these other places and against other defendants all share the same general categories and subcategories, even though there may be some differences here and there?

14:32:06

A Well, that's -- they're similar. It's not -- can you repeat the question, please?

Q Sure. Sure. Sure. And why don't we -- we can be visual about it, okay?

So I'm looking at, and I'm putting on the ELMO, Exhibit P23105A.

14:32:24

You recognize this as the redress model you prepared titled: Lake County Opioid Epidemic Abatement Plan Estimates. Okay?

A Yes.

14:32:44

Q And you spent some time with Mr. Lanier talking about the abatement categories and subcategories that appear on the right-hand side, categories 1 through 4 with lettered subcategories beneath them.

14:32:57 Do you see that?

A Yes, I do.

Q Okay. This general framework is consistent with the framework you have proposed in cases involving other communities and other classes of defendants, correct?

14:33:10 **A** Yeah. It's consistent. I mean, the exact categories and subcategories are not identical case to case, and there are a variety of reasons for this. But the -- but -- and the grouping of specific subcategories within categories is not necessarily identical either.

14:33:29 But the elements that are here, the types of services, the types of program, and the foundation of science that we have that these programs rest on, that is highly consistent, and not only from my cases with one another but with an enormous body of evidence beyond litigation-related

14:33:49 abatement activities.

So there's a lot of consistency across different proposals, but they're different also. There are differences. They're not identical.

Q And outside the litigation context -- and I think you

14:34:05 just referenced this.

Outside the litigation context, you advocate for the very abatement measures that appear in your plan with regard to the two counties here as a means of abating the opioid epidemic, correct?

14:34:21 **A** Well, I and many, many others in many different forms. I mean, there's -- it's fortunate -- despite the tragedy of the opioid epidemic and the fact that we're two decades later having this conversation, it's fortunate that there is an enormous amount of consensus about what needs to be done.

14:34:40 **Q** So outside the litigation context, when you are not testifying for a municipality or a state or serving as an expert witness, you are advocating for many of the same measures that appear in your plans for Lake and Trumbull County, correct?

14:35:04 **A** Well, I mean, to the degree that they make good public health sense, sure. So if you take something like treatment expansion, I may speak passionately or sort of -- you know, I may speak about the importance of treatment expansion beyond the context of litigation, if that answers your question.

Q And you may speak or advocate for SSP programs, correct?

A Absolutely.

Q And you may speak and advocate for prescriber education programs?

14:35:37

A Yes. I've spoken about and in some cases evaluated a variety of different programs and services that can be used to reduce opioid-related harms.

Q Okay. And you've published articles on the abatement interventions that appear in your redress models and in your expert report for Lake and Trumbull Counties, correct?

A I've published some, yes.

Q Okay. You've participated in reports, sponsoring many of the abatement measures in your plan here. And I'm thinking in particular of the Johns Hopkins report that's attached as Exhibit A to your expert report.

A Yes. I believe -- if this is from *Evidence to Impact*, I believe, it was probably about 2017 and produced in collaboration with the Clinton Foundation and the Johns Hopkins Bloomberg School of Public Health.

Q Correct. And the Hopkins publication you just testified about contains many of the same interventions that you testified about in your abatement plan in this case, correct?

A It does. It was written at one point in time and it was written for a different purpose and a bit of a different audience, but, yes, the -- to the degree that a given topic is examined there and relevant here, there would be overlap, absolutely.

Q Okay. And if you were to propose an abatement plan to

a governor or to a legislator -- a legislature, the interventions in your abatement plans in this case are the interventions that you would propose to the governor or the legislature, correct?

14:37:19 **A** Well, I suppose it depends how much time I have and what I'm charged to do. I mean, if I'm -- if I have, you know, five minutes for public comments, I might speak to some dimensions of abatement. If I was asked by a governor tomorrow to propose a plan for her state, a statewide

14:37:40 program, my guess is that it would look -- it would -- it would leverage and use much of the same evidence that's reflected in my recent abatement reports that have been litigation focused.

Q Okay. And I know, I remember back in trial one,

14:37:58 people took out testimony, Ms. Sullivan, you may remember that, your old Congressional testimony. I'm not doing anything like that, okay? Maybe later, but not right now, okay?

But I do believe that you testified in the Washington

14:38:12 State trial -- because you did testify in that trial, correct?

A In the distributor trial in Washington, yes, I've testified.

Q Okay. And you sponsored a similar abatement plan in

14:38:21 that trial, correct?

A Yes.

Q And you testified in that trial that if you were asked by a governor or a legislature to propose an abatement plan, it would be remarkably similar to the abatement plan you proposed in the litigation, correct? You remember that?

14:38:39

A Well, I -- those sound like my words. And I guess just to qualify, it depends what I was asked to do, but that -- yes, I think that I would -- it would be helpful to know the context in which this conversation or testimony happened.

14:38:57

But the bottom line is that the evidence is the evidence about what needs to be done, and so if I was asked today by a governor to design a plan for her state, I think that I would -- that the plan would look very similar to what I've designed in this instance, yes.

14:39:13

Q And in this instance, you mean the plan you designed for Lake and Trumbull Counties?

A Well, that's right. Although, I'd have the benefit of 18 months, and the scientific evidence moves quickly in some domains, so, you know, there would be newer evidence to bring to bear.

14:39:26

I mean, just consider the evidence from this morning that overdoses have hit a new historical all-time high. So I would bring new evidence to bear, but my methodologic approach and my scientific approach would be very similar to

14:39:43

what I've done.

Q And subject to new information, the interventions would be substantially similar to what you propose here?

A Always guided by information that's provided to me by the relevant parties, and by my discussions with local stakeholders on the ground, and by my evolving experience in abatement within communities around the country.

Q And I believe you testified to this already, but your plan is indeed rooted in public policy, correct?

A Well, it's rooted in science.

Q Okay. It's rooted in science.

You believe that the measures set out in your report in concert with one another can reduce opioid-related harms in the counties by 50 percent over 15 years, correct?

A Yes. That's true.

Q Okay. Because you're projecting into the future, further extrapolation would be required to fully estimate the impact of the measures you propose, correct?

A Yes. That's true.

Q Okay. And estimating the expected impact of specific interventions within specific communities is prone to uncertainty, correct?

A Yes.

Q You understand that Lake and Trumbull County have mobilized in many ways to address opioid misuse and

addiction, correct?

A I understand that they have done a lot with not that much, and I -- you know, the conversations that I had with individuals such as Kim Fraser and April Caraway impressed upon me their efforts, as did my reviews of the community health assessment in Trumbull County and both counties' community health improvement plans and a variety of other materials that I had the opportunity to review as part of this work.

14:41:52 **Q** So Lake and Trumbull County -- Lake and Trumbull Counties have mobilized in many ways to address opioid misuse and addiction?

A Well, I mean, I think -- I think overdose deaths were higher last year than ever before in the counties, and this year, they may be worse yet, if the experience in the counties is similar to the experience nationally.

So I think that they, again, have done a lot with a little, but I also think that it's clear from my review of materials for this case that -- that there's an enormous amount of work to be done in these communities.

Q Both counties have made substantial investments to address the epidemic, correct?

A I think they have, yes.

Q The investments also made by the counties to address the epidemic are laudable, in your opinion, correct?

A Yes.

Q And you understand that the counties already are undertaking many of the interventions that your plan proposes, correct?

14:42:50 **A** Well, they're undertaking some, and they're not undertaking others. And the ones that they're undertaking, they're undertaking with varying degrees of resource or resource constraint and varying amounts of rubber band and Scotch Tape. So I do understand that they have activity in

14:43:09 a number of areas, but I also understand that they have enormous needs.

Q Could you please turn to page 68 in your report, Dr. Alexander.

A 60?

14:43:25 **Q** 68.

A Okay.

Q And if you could please look at the first sentence of paragraph 216. You state here: The communities are already undertaking many evidence-based abatement interventions that

14:43:50 reflect the overarching principles as well as strategies that I outline above.

Do you see that language?

A I do. And --

Q Did I read that language correctly?

14:43:59 **A** Yes, you did.

Q Is that a truthful statement?

A It is, yes.

Q Okay. Both counties provide for addiction treatment, correct?

14:44:10 **A** With varying degrees of comprehensiveness and coordination, yes, that's true.

Q There are residential facilities in both counties, correct?

A Yes.

14:44:19 **Q** There are ongoing initiatives to provide opioid-related education and prevention in the counties?

A There are many initiatives and many areas where there are large amounts of unmet need.

Q Okay. There are drug disposal collection sites in

14:44:33 both counties, correct?

A That's a great example. I believe that disposal sites -- it should be no harder to get rid of a bottle of oxycodone than it is to get it filled in the first place. And, unfortunately, it is harder to get rid of it and to do

14:44:47 so responsibly, so --

Q How many drug disposal sites are there in CVS pharmacies in Lake and Trumbull County?

A I don't know.

Q You don't know.

14:44:58 There are preexisting help lines to link individuals

to care in the counties, correct?

A Yes.

Q There are quick response teams in the counties, correct?

14:45:08 **A** I believe Newton Falls may be the community in Trumbull County that may have a quick response team, and I believe through the Sheriff's Office in Lake County there may be a quick response team. But I think this is another great example where there may be some activity but that

14:45:26 there is an enormous opportunity to expand the breadth and depth of these teams.

Q Naloxone distribution and training are provided in both counties through Project Dawn, correct?

A Another great example. That --

14:45:41 **Q** Sir, before you give explanation, let's get a yes or a no so the record is clear, and then you can give your explanation.

Naloxone distribution and training are provided in both counties through Project Dawn?

14:45:52 **A** Yes, I believe that's true.

Q And there are drug courts in both counties, correct?

A I believe that's true.

Q Okay. Now, your abatement plan does not subtract any of the preexisting services and programs in the counties

14:46:06 that already address opioid misuse and addiction?

A It does not.

Q Okay. It doesn't subtract any preexisting funding that support the services and programs in the counties addressing opioid misuse and addiction?

14:46:22 **A** It does not. I didn't try to net out the current provision of services when I made my estimates.

Q Okay. So you do not identify in your report or in your redress models the pertinent services that already are being provided in the counties and then net them out of your

14:46:40 plan?

A Well, that's -- I mean, I qualitatively looked at a large number of programs and services, but it's correct that I didn't try to quantitatively net the volume of activities out. In part, because I have no way of knowing next year or

14:46:59 the year after or the year after that whether the current provision is going to increase, decrease, or stay the same.

Q So you do not differentiate in your plan between preexisting services already in place and any additional services that your plan may call for?

14:47:16 **A** I didn't make recommendations about plans -- about services on the margin. I made recommendations for what I thought would constitute a comprehensive and coordinated abatement program.

Q Okay. So if the Court were to try to determine -- if

14:47:33 the Court were to try to determine what is needed above and

beyond what already is in place, your plan wouldn't provide that information, correct?

A Well, I think my report would provide a lot of valuable information for the Court, but -- but I don't directly enumerate the margin, if that's what you're asking.

Q Okay. So if the Court were to try to subtract from your plan the services and programs that already are in the counties, the Court -- the Court, or counsel for that matter, would have to undertake that effort because -- because your report doesn't do that?

A My report does not provide that information. That's correct.

Q Okay. And if the Court were to subtract out from your plan the services and programs that already are in place in the counties, that would operate to reduce the estimates of what is needed to abate the epidemic, correct?

A Yes, it would. Although, it would become a much more complex task going forward over time. But, yes, it would lead to a reduction in the estimates that I provide.

Q You agree that any abatement plan must be tailored to the particular community in which it's being implemented, correct?

A Yes, I do believe that.

Q Okay. And that goes for your plan too?

A Correct.

Q Your plan must be customized for each of the counties, correct?

A Yes.

Q And you leave it to the counties ultimately to tailor and customize your plan to their specific needs?

A Yes. The counties or the courts, other parties involved.

Q Okay. You leave to the counties themselves to ultimately determine the right mix of services to go into their abatement plan, correct?

A Yes.

Q And you agree that the specific combination of measures from your abatement plan that is implemented in each county should be subject to the opinions of county stakeholders, policymakers, and subject-matter experts in the counties, correct?

A Yes, I do.

Q And the stakeholders in each county should make these decisions, including elected officials, correct?

A Yes. Among others.

Q County commissioners?

A Yes.

Q Other county officials?

A Yes.

Q Sheriffs?

A Yes.

Q Mayors?

A Yes.

Q Judges?

14:50:17 **A** Yes.

Q And so on?

A I'm sorry?

Q And so on. There's other stakeholders, like by way of example, not to call her out, like Ms. Fraser, correct?

14:50:27 **A** Yes. And people with lived experience, I mean, people that have -- people that this plan is for, people --

Q People in the communities?

A People that have been directly impacted by the opioid epidemic.

14:50:37 **Q** In the communities?

A In the communities, yes.

Q Okay. Now, you're a doctor, correct?

A Yes.

Q You're an internist?

14:50:47 **A** Correct.

Q You're a practicing internist. I think you testified at the first trial that you continue -- you continue to practice and provide medical care to patients. Correct?

A Yes, I do.

14:50:59 **Q** Okay. You're a pharmaco-epidemiologist, correct?

A Yes.
Q Okay. You're a professor?
A Yes.
Q Okay. You're a scholar?
14:51:12 **A** Did you say a scholar?
Q Scholar.
A I mean, I'm an academic. I don't know if I would call -- I'm an academic.
Q Okay. You write articles and you study -- you study
14:51:23 epidemiological issues like the opioid epidemic?
A That's true.
Q Okay. Not a lawyer, correct?
A No.
Q You don't have a law degree?
14:51:32 **A** I do not.
Q Not a legal expert, correct?
A Well, I've learned a lot from the past few years, but I don't --
Q You're not a legal expert?
14:51:41 **A** I'm not a legal -- I wouldn't call myself a legal expert, no.
Q Okay. You're not an expert in legal interpretation?
A No.
Q Not an expert in legal doctrine?
14:51:50 **A** Not my focus.

Q Okay. You don't work in Lake County, correct?
A I don't, but I've learned an enormous amount about the county through my work there, that is, through my work in this case.
14:52:02 Q But you don't work in the county?
A No. I work in Baltimore.
Q Okay. You've never worked in Lake County?
A I have not. Although, I lived for four years in Cleveland Heights, which as the crow flies is quite close.
14:52:15 Q Okay. And that's when you bagged groceries at Giant Eagle, right?
A It's not. I grew up in Pittsburgh, which is where I bagged groceries.
Q Okay. You don't work in Trumbull County because you
14:52:26 work in Baltimore, right?
A That's correct.
Q And you never worked in Trumbull County even though you grew up in Pittsburgh?
A That's correct.
14:52:32 Q You're not a social worker, right?
A No. But I've worked closely with social workers clinically and have worked in social services administration -- I've collaborated with individuals that are trained in social services administration.
14:52:45 Q But you don't have a degree in social work, correct?

A I do not.

Q You're not an addiction treatment counselor, correct?

A I'm not.

Q Okay. You're not a psychiatrist?

14:52:54 **A** No. But I see many patients with psychiatric disease, but I myself am an internist, not a psychiatrist.

Q And you're not a psychologist, correct?

A Correct.

Q You've never worked in law enforcement?

14:53:06 **A** That's correct.

Q You have no degree in law enforcement?

A Correct.

Q Never worked in a court, correct?

A That's correct.

14:53:11 **Q** You've never operated an addiction treatment clinic?

A I've worked with many patients that have addiction and studied addiction for many years, but I have not operated an addiction treatment facility, no, I have not.

Q And even though some of your patients -- and I believe you testified about this in the first trial. I believe that you testified that some of your patients, as an internist, suffer from substance use disorders, correct?

A That's true.

Q Okay. And oftentimes you'll work with addiction specialists in crafting treatment plans for them, correct?

A Or I'll manage them myself. It depends on the nature of the case. It's just like someone with heart failure, sometimes I manage them, sometimes I refer them to cardiology and comanage them.

14:53:55 **Q** But you're not an addiction specialist yourself, correct?

A Well, I have spent a lot of time over the past 10 to 15 years studying the opioid epidemic, and I've learned a lot about addiction in that context, and I've treated a lot

14:54:09 of patients with addiction, so I think those are the experiences with addiction that I bring to this work.

Q But when it comes to patient care, you yourself are not an addiction specialist, correct?

A I would characterize myself as an internist, as a

14:54:24 general internist.

Q And not as an addiction specialist, correct?

A I mean, again, clinically, addiction is just like cardiovascular disease and pulmonary disease. It's something that I help manage as an internist. But I haven't

14:54:41 hung up a shingle that says: Dr. Alexander, MD, Addiction Specialist.

Q And you testified in the trial, the first trial in this case, that you weren't an addiction specialist, correct?

14:54:54 **A** Which trial are you referring to?

Q The one in this courtroom last October and November.

A Oh, I see. I mean, I think that my answers were probably pretty similar, so I don't know my exact words. But the bottom line is through my clinical work and through my research, I've had a lot of opportunities to study addiction and to understand addiction and to treat addiction, but if I just met you on the street, I'd describe myself as a general internist, not as an addiction specialist.

Q And you've never prescribed buprenorphine for addiction treatment, have you?

A In fact, I have, yes.

Q Do you have the licensure to prescribe buprenorphine for addiction treatment?

A Well, let me think about that for a minute. So I have patients that are on buprenorphine, and I do not have an X-waiver. So I believe I may have misspoken and I probably have not prescribed buprenorphine for them.

I have certainly prescribed other opioids, but I think for these patients, some are stably maintained, but I don't think that I have prescribed them because I don't have an X-waiver.

Q And you haven't prescribed methadone for addiction treatment to any of your patients?

A No, I have not.

Q And you've never operated a syringe services program, correct?

A No, I have -- I've volunteered at a syringe service program, but I have not operated one.

14:56:15 **Q** Okay. Let's go back to that first trial, the one we just talked about, October-November, in this courtroom involving these defendants.

You testified in that trial, correct?

A Yes, I did.

14:56:24 **Q** Okay. But you didn't attend the remainder of the trial, what occurred before you testified and what occurred after you testified, correct?

A That's correct.

Q You didn't watch the trial, correct?

14:56:35 **A** That's correct.

Q You didn't review the testimony at trial of any other witnesses, correct?

A I believe that's correct.

Q And you didn't review the jury instructions that Judge

14:56:47 Polster gave at the trial, correct?

A That's definitely correct.

Q Okay.

MR. DELINSKY: Judge, now -- I have no idea what time it is. If you -- if you want to break, we'll

14:56:57 break. If not, I'm happy to go.

THE COURT: All right. If this is a convenient time. I try to do it when it makes sense in your examination.

So we'll take a break, 15 minutes, and then pick up with the balance of your testimony, Doctor.

(Recess taken at 2:57 p.m.)

(Court resumed at 3:20 p.m.)

THE COURT: Please be seated.

And, Doctor, you're still under oath from before the break.

So you may continue, Mr. Delinsky.

MR. DELINSKY: Thank you, Your Honor.

BY MR. DELINSKY:

Q Dr. Alexander, one of the measures included in your plan is a surveillance program, correct?

A Can you repeat that, please? I had trouble hearing.

Q My apologies.

One of the measures included in your abatement plan for the counties is a surveillance plan?

A One of the measures -- I still didn't hear the last part. Surveillance...

Q Program. A surveillance program.

A Yes. Absolutely.

Q Okay. That's a component of the abatement plan you're proposing for Lake and Trumbull Counties?

A Absolutely.

Q Okay. And this is at core, I'm using my own words here, it's a data gathering program and a data analysis program?

15:21:26 **A** Well, it's to provide a mission control for the activities. I mean, there has to be a cockpit where information is coming in and midcourse corrections can be made so that resources are allocated in a manner that produces the greatest good for the greatest number while, 15:21:42 you know, fulfilling other objectives as well.

Q And one of the ideas behind the program is that it would gather a wide array of data and put it to use to inform abatement on a moving-forward basis, correct?

A Yes.

15:21:53 **Q** And it would be a program to sort of gather data and put it to use in future months and in future years?

A Yes. I mean, it should be as timely as possible, so ideally, you want realtime data where you can sort of see yesterday how many overdoses occurred and the like. But, 15:22:14 yes, it would be a program to allow, again, for a mission control for the abatement program to be run and coordinated -- in a coordinated fashion with a -- and producing the greatest return on investment.

Q Okay. And the surveillance program would entail the 15:22:31 creation of a team of professionals, correct?

A It would require such. I mean, there might be some reorganization of individuals currently within the county frameworks, but I think that new hires would be required as well.

15:22:45 **Q** And I believe your plan, but I'm sensitive to that it might be in the report versus the redress model, so -- so you'll clarify, okay? I don't want to overstate.

But your plan recommends that the team include epidemiologists and data scientists?

15:23:02 **A** Yes.

Q Okay. And the surveillance program would allow for relevant data from a variety of local, state, and national sources to be gathered, curated, integrated, and analyzed?

A That's correct.

15:23:21 **Q** Okay. And the purpose of the surveillance program and this data would be to identify and respond to changing needs in the community, correct?

A Yes.

Q Quality surveillance data on a moving-forward basis is

15:23:41 key to identifying and responding to changing needs in the community?

A Yes.

Q The data is needed to better understand key aspects of the dynamic nature of the epidemic that are not visible

15:24:01 through existing data channels?

A Yes.

Q And the truth is that the opioid epidemic is a complex phenomenon, correct?

A Yes, it is.

15:24:14 **Q** The opioid epidemic continues to change and evolve at a national and state level?

A Yes.

Q At a local level, these changes have often been even more profound in the opioid epidemic?

15:24:31 **A** Well, there's changes and evolution at every level.

Q And at the local levels, at times the changes have been even more profound when it comes to the opioid epidemic?

A Yes, that could be.

15:24:44 **Q** And counties, therefore, need, as you've already testified, timely and accurate information on a going-forward basis, correct?

A Yes.

Q And counties need timely and accurate information to

15:24:58 make informed decisions on resource allocation in future months and future years?

A Yes.

Q Without such information, the communities are flying blind, no better off than an airplane without access to the

15:25:14 flight instrument panel?

A Right. That's the analogy of a control room. But I want to be clear, it's not -- it's not either data or no data, visibility or no visibility. But, yes, it's important, the greater the coordination and integration and curation of data that's available and information that county decision makers and others can use, the more -- the more responsive an abatement program can be deployed and successfully administered.

Q Okay. And do you recall writing in your report that without the information that would be supplied by the surveillance program, the communities would be flying blind, no better off than an airplane pilot without access to the flight instrument panel?

A Yes, I do.

Q And you wrote that, correct?

A Yes, I did.

Q And you meant it, it was true, correct?

A Yes.

Q Now, when you testified back at our trial in October and November, you talked about how prescription records could be used to determine if users of illegal opioids ever filled prescriptions for opioids.

Do you recall that?

A No. But I believe that to be the case.

Q Correct. So if you have a -- someone who's addicted

to heroin, you could use prescription records to determine if that person ever filled prescriptions for prescription opioids, correct?

A Yes.

15:26:57 **Q** Okay. And one of the kinds of data that could be put to use on a move-forward basis to assist abatement would be prescription records or prescription data, correct?

A One of many. One of many. Yes.

Q And OARRS is one source of prescription records that

15:27:14 the counties might use on a move-forward basis, correct?

A Again, one of many, but yes, it is.

Q The counties can derive clinical information from OARRS about patients and people, correct?

A Yes.

15:27:26 **Q** And OARRS can be used to identify patients who may need treatment, correct?

A Well, with a variety of caveats and limitations, I think that OARRS is one of several databases that can be valuable going forward, absolutely.

15:27:43 **Q** Okay. And another source of prescription records could be the data maintained by retail pharmacies like CVS, Walgreens, and Walmart, correct?

A Yes.

Q And the pharmacies could be called on to run queries

15:27:55 in their data, correct?

A They could.

Q And that would be appropriate and useful to your surveillance program, correct?

A Again, as one of many sources of information, it would be a useful input, yes, it would.

Q Okay. Each of the measures in your abatement plan should be assessed on a quarterly, biannual, or annual basis, correct?

A Yeah, so I know that the more frequent an assessment occurs, the more rapidly such information could be used to iteratively inform further abatement. So there are some measures that may be able to be assessed realtime, and I would never argue against that.

Q Okay. And quarterly, biannual, or annual assessments or assessments that occur even more regularly are a good thing, correct?

A Yeah. I mean, as with data itself, it has to be fit for purpose. But there's no question that there is important information that should be curated -- harmonized, curated, and used in order to track the progress of the abatement programs that I hope that these counties will have the opportunity to undertake.

Q And reassessing abatement measures as frequently as possible is necessary because it -- those reassessments can be used to inform further abatement, correct?

A Yeah. I mean, this isn't something where like you're going to cycle, you know, weekly and sort of continually pivot. You know, there need to be sustained long-term investments and sustained long-term commitments to the very programs that I advise. But -- but information can be used valuably to reappraise the outcomes of those interventions and to redeploy resources for the greatest good.

Q And in those reassessments or what you recommend occur on a quarterly, biannual, or annual basis, if not even more regularly, correct?

A Yes.

Q And the more frequently an assessment occurs, or a reassessment occurs, the more rapidly such information can be used to iteratively inform abatement, correct?

A Well, again, my program includes I believe 20 different categories of services and interventions, and it's hard to talk about them all in the abstract. So I would say that for many measures, such as those I propose in my report that we're discussing in paragraph 218, many of these measures could be assessed on a, for example, a quarterly or biannual or annual level, but there are other measures that should be able to be assessed in -- in much closer to real time in order to understand, you know, how the -- how the steamship is faring.

Q Okay. Now, mindful that the frequency with which a

reassessment is needed may depend on the particular program, as you just explained, the more frequent that an appropriate assessment occurs, the more rapidly the resulting information can be used to inform abatement moving forward, correct?

15:31:29

A I mean, again, there are costs to doing these assessments. There are costs to midcourse corrections, and so, you know, I'm having a bit of a hard time answering your questions in the abstract.

15:31:45

I think if we were talking about a specific instance, like, you know, interventions for high school students to help reduce nonmedical prescription opioids use, I could be more specific about the types of measures that I believe are appropriate or the frequency with which I think those measures should be addressed.

15:32:06

Q Dr. Alexander, could you please look at page 68 of your report. And in particular, paragraph 218, which is on the ELMO. And I'm boxing the sentence I want to read to you.

15:32:27

Each measure should be assessed on a quarterly, biannual, or annual basis, understanding that the more frequent an assessment occurs, the more rapidly such information can be used to iteratively inform further abatement.

15:32:47

Did I read that sentence correctly from your report?

A Yes, you did.

Q Did you write that sentence?

A Yes, I did.

Q Do you stand by that sentence?

15:32:55 **A** I do.

Q Is that sentence truthful?

A Yes.

Q Thank you.

Now, you're on the faculty at the Johns Hopkins Bloomberg School of Health, correct?

A Johns Hopkins Bloomberg School of Public Health.

Q Excuse me. Thank you for the correction.

What do you call it? Do you call it Hopkins, do you call it Bloomberg, do you call it both?

15:33:19 **A** I suppose it depends on who I'm speaking with.

Q What should I call it?

A Johns Hopkins Bloomberg School of Public Health.

Q You're trying to make it harder for me, huh?

THE COURT: Someone contributed to the full part of that name.

MR. DELINSKY: Judge, I believe it was like $7 billion or something like that.

THE COURT: All right. Then they want their -- their part of the name in it.

15:33:45 MR. DELINSKY: All right. We will honor that.

BY MR. DELINSKY:

Q Dr. Alexander, the faculty at the Johns Hopkins Bloomberg School of Public Health coordinated the release of a set of principles to guide state and local spending of opioid litigation settlement funds, correct?

A Yes. A select group of faculty, but, yes, they did.

Q Okay. And a large number of organizations from outside of Johns Hopkins signed on to those principles, correct?

A Yes.

Q Are you familiar with those principles?

A Yes.

Q Okay. One recommendation made in the guidelines is to establish a dedicated fund for opioid litigation funds.

Do you agree with that recommendation?

A I -- it would be helpful to have more context.

Q Okay. So, Dr. Alexander, I believe my colleague provided you with a document labeled CVS-MDL-4997, correct?

A Yes.

Q And are these the -- is document CVS-MDL-4997 the principles for the use of funds from the opioid litigation that we just began to discuss?

A Yes.

Q Okay. If you could please turn to page four of the document.

Okay. Page four concerns principle number one: Spend money to save lives.

You agree with that principle, right?

A Yes.

15:36:05 **Q** Okay. Pretty noncontroversial, right?

A Yes.

Q Now, you see as we move down on the page: How can jurisdictions adopt this principle?

Do you see that?

15:36:20 **A** Yes.

Q And number one is: Establish a dedicated fund.

Do you see that?

A Yes, I do.

Q Okay. And it says: Ensuring that funds from the

15:36:36 opioid lawsuits are being used to help people with substance use disorders is easier if dollars resulting from the various legal actions go into a dedicated fund.

Correct?

A Yes.

15:36:47 **Q** You see that?

A Yes.

Q And then, above, if you go to the top of the page again, you see it states: Given the economic downturn, many states and localities will be tempted to use the dollars to

15:37:02 fill holes in their budgets rather than expand needed

programs.

Do you see that?

A Yes.

Q Okay. And it goes on to say: Jurisdictions should use the funds to supplement rather than replace existing spending.

Do you see that?

A Yes, I do.

Q Okay. So let's go back to my question.

Do you agree with the recommendation set forth in this exhibit to establish a dedicated fund to hold opioid litigation funds in a particular jurisdiction?

A I think there's merit to that proposal. I think there are a number of ways that a fund -- such a fund could be structured. And I would want more time, you know, to consider the merits of different strategies and structures.

But I believe in -- I believe in -- I agree with the general principle that ensuring that funds from lawsuits are used to help people with substance use disorders is easier if there's some protection of those funds.

Q Okay. Now, the second principle -- well, I don't know if it's a principle or a point, but beneath the language about establishing a dedicated fund, it states: Supplement rather than supplant existing funding.

Do you see that?

A Yes, I do.

Q Okay. And another purpose of establishing a dedicated fund would be to ensure that opioid litigation funds are used to supplement rather than replace existing spending on the opioid epidemic.

15:38:41

Do you agree with that principle?

A I think that's a complicated -- there's not a simple answer to that question. It's a -- it is a question that ultimately depends, I think, and needs to be guided in part on the specific communities and the context and circumstances of specific communities, the magnitude of their need, the magnitude of their current investments, the stability of their current investments, the wisdom of their current investments, and so forth. So I'm afraid that I don't have a simple yes-or-no answer for you on that one.

15:38:57

15:39:16

Q Do you disagree with this principle that opioid litigation funds should be used to supplement rather than supplant existing funding for programs that are addressing the opioid epidemic?

A Again, that extends beyond the context of the materials that I've submitted, and I think it's -- there's -- I don't -- I don't think -- I don't have a simple answer to that question.

15:39:31

Q Were you involved in the preparation of this document?

A No, I was not.

15:39:51

Q Did you endorse this document?

A I -- I don't believe my name is on it, if that's what you're asking.

THE COURT: Whose document is this?

15:40:02 MR. DELINSKY: This document comes from the Johns Hopkins Bloomberg School of Public Health, Your Honor.

THE COURT: Oh, all right.

THE WITNESS: And specifically, Your Honor, there is a fund that was generated from a philanthropic gift 15:40:17 by the mayor called the Bloomberg American Health Initiative, and I believe that this document arose from the Bloomberg American Health Initiative.

THE COURT: Okay. Thank you.

BY MR. DELINSKY:

15:40:28 **Q** So is it your testimony that you are not in a position to either agree or disagree that opioid litigation funds should be used to supplement rather than supplant existing funding?

A Well, I mean, there may be a program that is funded 15:40:46 through a grant from the CDC where the funding is at risk of getting pulled in January of 2023, and it may be a valuable program and a program that has delivered well for the community, and so, I don't even know how you would consider that. Would that be an instance where I would be -- would 15:41:06 that be supplementing or would that be replacing or would

that be complementing if we were to pick up the costs of that program going forward?

I guess my point is that the issues here are complex with respect to how the funds should best be allocated, and ultimately that allocation is something that I leave for the Court and the communities to determine.

Q Okay. That allocation is not subject to any opinions of yours, correct?

A I think there are a lot of very good ideas in this document entitled: Principles For the Use of Funds From the Opioid Litigation, and -- and I think there's a lot of -- a lot of wisdom to be found in this, and I'm not surprised if this has been endorsed by many parties. But this is beyond the scope of my report or the models that I've submitted for this case.

Q Okay. Let's move on from number two and just go to number three real quick: Don't spend all the money at once.

And I'm going to read to you the last sentence of that paragraph: Should the opioid lawsuits result in a lump sum payment to jurisdictions, they should consider establishing an endowment so the dollars can be used over time.

Do you agree with that principle?

A I do.

Q That dollars should be allocated over some period of years, correct?

A Yes. I do believe that.

Q Okay. The last one: Report to the public on where the money is going.

Am I safe in assuming you agree with that principle as well?

15:42:37

A Yes.

Q Okay. And you agree, do you not, that it would be prudent to appoint an administrator to ensure that funds are disbursed and used for appropriate opioid abatement purposes?

15:42:52

A I think that it's important that the funds are used for the purposes that they're intended and that there is an administrative structure in order to facilitate such. But whether or not that's a court-appointed administrator or another mechanism is for the courts to decide.

15:43:07

Q Are you aware that Lake County has settled its opioids claims against Rite Aid?

A I'm not. I mean, I -- my understanding is that there was one party to the prior phase I, if you will, that had separated and that had settled, but I wasn't aware of the particular party or the particular county or counties.

15:43:31

Q Okay. Let me go in reverse order.

You are aware, because you just said so, and I'm sure you remember testifying here about Giant Eagle because that's why I -- it came out that you bagged groceries at

15:43:46

Giant Eagle when you were a young kid. Right?

A Correct.

Q Okay. And you do know that Giant Eagle, who was here when you testified at trial, entered into a settlement with Lake and Trumbull Counties?

A That's -- that's what I was referring to. That's my understanding.

Q Okay. And you are not aware that Rite Aid, which you know is another pharmacy, entered into a settlement with Lake and Trumbull Counties?

A I don't believe I was aware of that, no.

Q Okay. Let's focus on Giant Eagle, okay? Let's focus on Giant Eagle.

Do you know how much Lake County received in the Giant Eagle settlement?

MR. WEINBERGER: Objection.

THE COURT: Well --

MR. DELINSKY: Just a few questions, Your Honor.

THE COURT: First of all, I don't know if it's public, even if he knows it, and I'm not -- so I don't want to make it public.

MR. DELINSKY: I won't elicit the amount.

THE COURT: And I'm not sure how it's possibly relevant to his abatement plan, his testimony.

MR. DELINSKY: Your Honor, we'll get to this. About two or three questions. That's all.

THE COURT: All right.

BY MR. DELINSKY:

15:45:00 **Q** All right. Without specifying the amount, although I do think it's public, do you know how much Lake County received in the Giant Eagle settlement?

MR. WEINBERGER: Objection.

THE COURT: I'm going to sustain the

15:45:09 objection.

MR. DELINSKY: It's just asking him if he knows, Your Honor. Not how much. If he knows.

THE COURT: All right. I'll let him answer if he knows, but he'd only know it -- well, if he read it in

15:45:21 the paper, then it's public. If he got it through counsel, I mean, whatever.

You can answer the question if you know.

THE WITNESS: I do not know, Your Honor.

THE COURT: Okay.

BY MR. DELINSKY:

Q Same question for Trumbull County. Is it safe to assume you don't know how much Trumbull County received in the Giant Eagle settlement?

A That's correct. I don't know.

15:45:36 **Q** Okay. And you obviously don't know how much either

Giant Eagle -- either Lake County or Trumbull County received in the Rite Aid settlement because you don't know about that settlement, correct?

A That's correct. I don't know.

15:45:49 **Q** Okay. Has either Lake County or Trumbull County asked for your input on how to use any of the funds received in the Giant Eagle settlement?

A No.

Q Okay. Are you aware that Lake and Trumbull Counties

15:46:10 have received or will be receiving funds from other opioid litigation resolutions?

A No. I've not followed -- I mean, any more so than understanding that there's a deal that is perhaps close to being completed or something or completed with distributors,

15:46:30 but I don't have any knowledge of the monies that Lake or Trumbull County might receive as a part of that.

Q Okay. Has either Lake or Trumbull County asked for your input on how to use any settlement funds that might be received from a distributor settlement?

15:46:48 **A** No.

Q Okay. Generally speaking, there have been three waves of the opioid epidemic, correct?

A Well, we and others are now describing a fourth wave, but, yes, historically, the epidemic has been characterized

15:47:06 as existing in three waves.

Q Okay. The first wave was from '99 to 2010 and principally concerned prescription opioids, correct?

A Yes.

Q Now, even though prescription opioids didn't go away, okay -- and I've read your testimony on this, so I want to be honest about it. Understanding that prescription opioids didn't go away, the second wave of the opioid epidemic was from 2010 to 2013 and principally concerned heroin, correct?

A Well, it was characterized by large increases in heroin morbidity or mortality, yes.

Q Okay. And you agree that the second wave involving heroin was largely as a result of increased geographic availability of historically low-cost, high-purity heroin?

A Those sound like my words. And I think that's one of the factors that contributed to that second wave.

Q Okay. The third wave of the opioid epidemic -- mindful there still were prescription opioids and there still was heroin, the third wave of the opioid epidemic began in 2014, and it principally concerns illegal fentanyl, correct?

A Yes.

Q There has been a near exponential increase in overdose deaths involving illicit fentanyl and other illicit synthetic opioids, correct?

A Yes. Over the period from 2014 to -- I mean, it's --

frankly, it's ongoing.

Q And the impact of illicit fentanyl has been especially severe in the communities, correct?

A Well, I mean, the communities have been hammered in multiple ways, but fentanyl has certainly caused many harms, yes.

Q And the impact of illicit fentanyl has been especially severe in these communities, correct?

A I believe that that's true, yes.

Q And illicit fentanyl, just to be clear, I don't think there's any dispute about this, comes from criminal drug trafficking organizations and enterprises, correct?

A Well, it's fed by an incredible thirst and demand for opioids and the relatively lower cost and higher purity of fentanyl relative to a bottle of pills, among other things. So there's not one factor alone. Just as with other dimensions of the epidemic, it's a complex process, but --

Q I'm not asking about factors. I'm asking about sources.

You don't go to your corner CVS to get illegal fentanyl, correct?

A That's true.

Q You don't go to the corner CVS to get your heroin laced with illegal fentanyl, correct?

A That's true.

Q When a person gets illegal fentanyl, they're getting it from a criminal organization, correct?

A Well, they may be getting it from a friend, they may be getting from a family member, they may be getting it from, you know, a trafficking network, but they're certainly getting it through the illicit supply chain, yes.

Q Okay. And, ultimately, that illicit fentanyl is reaching the streets through drug cartels, correct?

A Well, I -- you know, if -- to the degree that it's manufactured in China or Mexico and brought into the country, then I believe that cartels or major drug traffickers would be involved in its distribution. But ultimately, it makes it down the supply chain and can be given as innocently as, you know, three kids at Ohio State or whatever the college was that were found dead within the past few weeks. For all I know, I don't know the details of that case, but they may well have been given a counterfeit pill that they thought was -- they thought was just quote/unquote, you know, oxycodone and it actually was a counterfeit pill and it killed them.

Q Illicit fentanyl reaches people through the illegal market, correct?

A Yes.

Q Okay. Now, I think a few minutes ago you referred to, you know, a new developing fourth wave, right?

A Yes.

Q Okay. And you wrote an article about that, right?

A Yes, I have.

Q Okay. And the -- what you mean by that fourth wave is that the opioid epidemic in recent years has come to include the combination of illicit fentanyl with illegal stimulants like cocaine or methamphetamine, correct?

A That's correct.

Q Okay. And this is a new twist to the epidemic?

A It is. But the fourth wave is also characterized by increasing use of stimulants, with or without opioids combined with stimulants.

Q Okay. And this new wave, this fourth wave, is posing urgent and novel public health challenges itself?

A I believe that's true.

Q Okay. And this new twist, this new wave reflects the rapidly evolving nature of the opioid epidemic, correct?

A Yes.

Q There are many different paths to opioid addiction, right?

A Yes.

Q We talked about some of this, so let's be quick.

Prescription opioids are one path, correct?

A Yes.

Q Prescription opioids obtained illegally and used

nonmedically is another path?

A Yes.

Q Heroin is a path, correct?

A That's another one.

15:52:47 **Q** Fentanyl is another path, correct?

A Yes, it is.

Q And that's illegal fentanyl, correct?

A Yes. Although, frankly, legal fentanyl has also caused plenty of problems.

15:52:56 **Q** Both?

A Correct.

Q Okay. The fourth wave is the illegal fentanyl, correct?

A The fourth wave is primarily characterized by rising

15:53:04 harms from stimulants and also from stimulants being combined with opioids. Many people using stimulants are also using opioids, whether prescription opioids or nonprescription opioids.

Q And another path to opioid addiction involves

15:53:20 polysubstance use, correct?

A Yes.

Q And that's where a person -- I'll get the words wrong, and I certainly don't mean that pejoratively, but polysubstance use is when a person mixes opioid use with

15:53:34 other substances?

A Yeah. Many individuals may be prone to multiple use disorders.

Q Okay. So it could be the combination of alcohol and a legal or illegal opioid, correct?

15:53:45 **A** Yes.

Q The combination of marijuana with a legal or illegal opioid?

A Yes, it could.

Q The combination of cocaine with a legal or illegal

15:53:53 opioid?

A Yes.

Q The combination of methamphetamine with a legal or illegal opioid?

A Yes. But to be fair, I developed an opioid abatement

15:54:04 plan. I didn't develop a plan to abate all substance use disorders within the communities.

Q Okay. But your opioid abatement plan does address polysubstance users to the extent that it involves the misuse or addiction to opioids?

15:54:20 **A** Yes. It doesn't -- I don't exclude eligibility for treatment, I don't exclude people that have multiple use disorders from eligibility for treatment because they happen to have another use disorder in addition to opioid use disorder.

15:54:34 **Q** And let's get back to the paths to addiction.

Polysubstance use is another path to addiction, correct?

A Yes.

Q And there are many factors at play in leading to addiction, correct?

15:54:44

A Well, you know, biology, environment, and access are sort of the big three. But, yes, it's a complex concept.

Q Okay. Mental health can be in play in leading to addiction, correct?

15:55:03

A Untreated mental health such as untreated depression or untreated bipolar affective disorder could be a risk factor for addiction, yes.

Q Okay. And I believe you already testified to the following, but a person's family situation could be a risk factor that may lead to addiction, correct?

15:55:17

A Yes. There's often intergenerational perpetuation of addiction.

Q Okay. Socioeconomic factors could contribute or be a risk factor in leading to addiction, correct?

15:55:32

A They could be. It doesn't happen without access to products, but, yes, those are risk factors.

Q And opioid addiction is one of those diseases where you just can't predict who's going to develop it, correct?

A Not -- not with -- not with a lot of certainty, no.

15:55:51

Q No.

There's just no means to predict which individuals who are taking opioids will go on to develop addiction, correct?

A Well, I mean, there's an enormous amount of evidence suggesting the harms and the risks of nonmedical use and addiction among individuals receiving opioids, so I wouldn't want to suggest that -- that it's just sort of a crap shoot. For example, we know that the dose and duration of opioids received is significantly associated with the likelihood of being on opioids long term or developing addiction.

15:56:34 MR. DELINSKY: Paul, 19.

BY MR. DELINSKY:

Q Dr. Alexander, I believe we already covered this, but you testified at trial in this case brought against -- brought by the State of Washington against distributors, namely, Cardinal, McKesson, and AmerisourceBergen, correct?

A Yes.

Q And that was -- it was either this winter or this spring, correct?

A Yes.

Q And I have put before you a transcript of your testimony in that trial. And if you could please turn to page 5778.

And just for the record, the transcript has been marked as CVS-MDL-5002. And I'd like to direct you to lines 7 through 12. And I'm putting these lines and I'm

highlighting them on the ELMO.

You were under oath when you testified at this trial, correct?

A Yes.

15:58:04 **Q** And you stated, quote: Unfortunately, it is a disease that can't be predicted who is going to develop it. We can identify and know that there are some risks for addiction, but there is no means to predict the significant minority of individuals that are on opioids that will develop addiction.

15:58:27 Do you see that language?

A Yes, I do.

Q Did I read it correctly?

A You did. But it's not inconsistent with the statement that I made previously either. In other words --

15:58:38 THE COURT: I don't think it's inconsistent either, so I'm not -- I mean, I think that's what he said.

BY MR. DELINSKY:

Q Do you agree with this testimony?

A I do.

15:58:46 MR. DELINSKY: Okay. No further questions.

THE COURT: I hope he would agree. He said it under oath.

MR. DELINSKY: Good enough. There's nothing to talk about, Your Honor. I didn't know if I had a 1001 violation maybe, but I didn't think so.

15:58:57

THE COURT: All right. I don't think it was impeachment because it wasn't -- it was consistent. But, you know, there's no -- no problem bringing out that he said the same thing in Washington State.

15:59:11 MR. DELINSKY: All right. I'm moving on, Your Honor.

BY MR. DELINSKY:

Q Dr. Alexander, polysubstance use is the norm rather than the exception for most individuals with substance use

15:59:22 disorders, correct?

A Yes. I think that's -- that's often the case.

Q Okay. And a good number of people with heroin use disorder have cocaine use disorder, correct?

A Yes.

15:59:31 **Q** And a good number of people with heroin use disorder have methamphetamine use disorder too, correct?

A Yes.

Q Okay. Now, as an epidemiologist, you make estimates?

A Estimates?

15:59:48 **Q** Estimates.

A Yes.

Q Okay. And your analysis in this case includes estimates, correct?

A Yes. It includes estimates and mathematical

16:00:00 projections, yes.

Q Okay. And whenever possible, you try to base your estimates on local data, correct?

A All other things held constant, yes, that's true.

Q Okay. Now, attached to your report, and we've already discussed them, are two redress models, correct?

16:00:18

A Yes.

Q One is a redress model for Lake County, right?

A Yes.

Q And that's the document that Mr. Lanier marked as P-23105A, correct?

16:00:39

A Yes.

Q And the title -- the title of your Lake County -- of the Lake County redress model is: Lake County Opioid Epidemic Abatement Estimates, right?

16:00:57

A Yes.

Q The Trumbull County redress model that you prepared is marked P-23105B, right?

A Yes.

Q The title of the Trumbull County redress model that you prepared is: Trumbull County Opioid Epidemic Abatement Estimates, correct?

16:01:10

A Yes.

Q And the models indeed contain estimates, right?

A They contain lots of scientific information supporting estimates of the need for varied programs and services in

16:01:28

the counties.

Q So just at a high level, we'll get into some more details.

Your redress models are composed of estimates of the resources that you believe are needed to carry out your abatement plan?

A Yes. They -- I mean, they also contain populations and lots of different types of scientific information that serve as a foundation upon which those estimates are based.

Q You know that the Lake County ADAMHS Board has produced local data in this case, correct?

A Well, I've reviewed some information specific to Lake County, but I don't know of the specific documents that you're referring to.

Q Do you know that the Lake County ADAMHS Board produced data that shows information about the persons who have received treatment for opioid use disorder through providers sponsored by the Lake County ADAMHS Board?

A I don't know if I reviewed that as part of my work.

Q If it's not listed in your reliance materials, that means you didn't review it, correct?

A That's correct.

Q Do you recall reviewing it?

A I do not.

Q Okay. Do you know that Trumbull County produced

comparable claims data on the persons who its service providers provide treatment for opioid use disorder?

A I'm not sure. But claims data would provide a vast undercount of -- typically a vast undercount of a population having opioid use disorder.

16:03:22

Q That's not my question. My question simply is whether you reviewed it.

A I don't believe that I did. But I would have to review my materials relied upon list.

16:03:33

Q If it's not contained in your materials relied upon list, that means you didn't review it, correct?

A That's -- by my best judgment, yes.

Q And you don't recall reviewing it, correct?

A I do not.

16:03:45

Q Okay. That data would show within the population of persons who are receiving treatment what kind of treatment they are receiving, correct?

A I don't -- I don't know the nature of the data. If I didn't review the data, I can't speak to what it would contain.

16:04:04

I would just say that claims data are a highly imperfect and in many cases fundamentally flawed way of understanding the population with opioid use disorder in a given community.

16:04:18

Q Okay. But you don't know what's in it as you sit here

today?

A Well, I know what claims data is. I mean, as a pharmaco-epidemiologist, it's the primary source of data that I use on a daily basis to conduct the research that I use.

Q So you do use claims data on a regular basis in conducting your research?

A I do. And as with all data, it has to be used in a fit-for-purpose fashion.

Q Okay. And you don't know what fit-for-purpose fashion the claims data produced by the Lake County ADAMHS Board and the Trumbull County Mental Health and Recovery Board could have been put to use today because you don't recall it and you may not have reviewed it, correct?

A No. I don't -- I mean, there was a lot in that.

So claims data is very limited in estimating populations in need of opioid use disorder treatment because, unfortunately, as a wealth of evidence demonstrates, they don't interact with the treatment system and they're not getting treatment. So claims data is -- would be highly imperfect, if not fundamentally flawed, for the purposes that I needed data for in order to do the work that I did.

Q Okay. So your testimony is is that the trove of local data possessed by the Lake County ADAMHS Board and the

Trumbull County Mental Health and Recovery Board would not have been useful and important to you?

A Well, I -- what I thought you were asking about was claims data. And when you say "trove of local data," I don't know what you mean by that.

But if you're referring to claims data, again, claims data have pretty big limitations when trying to estimate populations in need of treatment.

Q And so, you wouldn't have put it to use, it wouldn't have been important to you in devising your estimates in this case?

A I'm also interested in information that I -- that I have access to as a scientist. That's what I do. And if I was provided with information, I would look at it and consider if I could use it or not and how.

But in this instance, it's not a source that I would use to base estimates of the need of the OUD population.

Q Okay. In devising the estimates in your abatement plan, you did not conduct any fieldwork in the counties, correct?

A I didn't visit the counties. Although, as I've mentioned, I lived close to Lake County for four years and whatnot. But I did review an enormous number of materials produced or relevant to the counties, and I also spoke with local experts on the ground.

Q Okay. Now, you reference in your report the use of focus groups, correct?

A It would be helpful to see that, if -- to --

Q Sure. Look at page 29, paragraph 87. Oh. I'm sorry. I used the wrong word.

You didn't conduct -- oh, no. Focus groups are there.

So these reports -- I'm reading to you, it's highlighted.

On page 29 your report says: These reports are generated through focus groups and qualitative interviews of individuals affected by the opioid epidemic, people who actively use drugs, those who are in recovery, family members of those with OUD, and community professionals that work to address OUD.

MR. LANIER: With due respect, Your Honor, he has not given a copy of this. I don't know if there's one with the witness. But Mr. Delinsky's covering up the sentences before that talks about --

MR. DELINSKY: I'll take that off.

MR. LANIER: -- what these reports are that are referenced there. And these reports is pretty critical to understanding the focus group question.

MR. DELINSKY: Yeah, you can read the whole thing. Didn't mean to hide it. Just wanted to make it simple for you.

BY MR. DELINSKY:

Q Do you see that language?

A I do. And I was going to ask, independently, if you could just read or if I could highlight the prior sentence which --

16:08:51

Q I'll read it.

Additionally, since 2000, the OSAM network has published semiannual reports on substance use trends across eight subregions in Ohio and targeted response initiatives to help guide additional interventions.

16:09:06

Did I read that correctly?

A Yes.

Q So the OSAM network is generating reports through focus groups, correct?

16:09:16

A They include information including focus groups and qualitative interviews, yes.

Q Okay. But you didn't conduct any focus groups yourself in the county. Maybe you looked at OSAM report focus groups, but you --

(Court Reporter interjection.)

MR. DELINSKY: We'll do it over. Sorry about that.

BY MR. DELINSKY:

16:09:53

Q You very well may have looked at OSAM reports,

correct?

A Yes.

Q But you yourself did not conduct any focus groups in the counties in preparing your abatement plan for the counties?

A That's correct.

Q Now, this language in your report also references qualitative interviews of individuals affected by the opioid epidemic, including people who actively use drugs, those who are in recovery, family members of those with OUD, and community professionals that work to address OUD, correct?

A Yes. That's true.

Q Now, you did interview three community professionals that work to address OUD, correct?

A Well, they -- they cover a pretty wide swath of the waterfront, but they're involved in the opioid abatement response within their counties, yes.

Q But you conducted no qualitative interviews of any individuals in the counties who actively use drugs, correct?

A That's correct.

Q You conducted no qualitative interviews of any individuals in the counties who are -- who are in recovery, correct?

A That's correct.

Q You conducted no qualitative interviews of any -- any

family members in the counties of those with OUD, correct?
A That's correct.
Q You have participated in studies where surveys have been conducted, correct?
16:11:29 **A** I have used, you know, probably a dozen different methodologies or more in studies that I've performed.
Q Okay. I'm asking about one, and that is, you've participated in studies where surveys are conducted, correct?
16:11:43 **A** Yes.
Q Okay. You conducted no surveys of residents of Lake or Trumbull Counties, correct?
A That's correct.
Q You conducted no surveys of OUD patients in Lake or
16:11:56 Trumbull Counties, correct?
A I didn't survey or engage individually with patients. I didn't feel that it was -- I felt confident, based on the resources that I had available to me and the methods that I used and the individuals that I spoke with and my
16:12:14 professional experience in other settings, that the information that I had was sufficient in order to produce these recommendations for the Court.
Q You made the decision that it would be better to rely on an estimate generated by another professor at another
16:12:43 university rather than conduct a survey of the people in the

two counties that are at issue, correct?

A Well, I don't know that that would have been even in the choice had I decided an alternative approach. But I have reviewed Professor Keyes' work. I've followed her work for some time. I hold her in high regard. I reviewed her work and her methodology, and I believe that it's an appropriate methodology for the task at hand.

Q So whereas you involved the use of surveys in other studies you've conducted, here you determined not to, correct?

A I mean, I've done surveys like looking at physicians' willingness to deceive insurance companies on behalf of patients. I've never undertaken a survey trying to estimate a population with opioid use disorder. It would be, if not a fool's errand, it would be a very, very dubious undertaking. And it's one that was not one that I considered as a viable alternative or -- as a viable and important alternative approach to the very good approach that I believe that I took, which was to work with Dr. Keyes and to review her methodology, be sure that I was comfortable with it, and to use it.

Q Well, you coauthored an article about prescription opioid diversion by HIV patients, didn't you?

A It would be helpful to see the article, please.

Q Okay. Sure.

MR. DELINSKY: 12, Paul.

MR. HYNES: Judge, do you want a copy?

BY MR. DELINSKY:

Q You've been handed, Dr. Alexander, an article marked CVS-MDL-4995.

Do you see that article?

A Yes, I do.

Q That article is titled: Estimating the Prevalence of and Characteristics Associated With Prescription Opioid Diversion Among a Clinic Population Living With HIV, correct?

A Yes.

Q You are one of five authors of the article, correct?

A Yes.

Q Okay. And this article involved the conduct of a survey of several hundred participants from a large urban HIV clinical setting, correct?

A Yes. This was a doctoral student's project examining a completely different question than the one that would have been the task at hand in this instance. I mean, it's apples and, you know, oranges.

Q But here's the problem I have with your answers, Dr. Alexander, is you're trying to guess why I'm asking you the questions. You are guessing that I am asking you these questions because they may go to the generation of OUD

population, and I may not be asking you the questions for these reasons.

Isn't it the case that surveys can be used to generate information on any number of helpful subjects, correct?

16:16:03 **A** Absolutely they can.

MR. WEINBERGER: Objection to the comments of counsel, and the argument of counsel.

THE COURT: Well, the question that -- the way you phrased it, Mr. Delinsky, is objectionable because

16:16:20 you're suggesting that he's guessing or speculating as to the motive for your question, which is irrelevant. You want to just ask him a question about surveys, focus groups, you can --

MR. DELINSKY: Will do, Your Honor. And I'm

16:16:35 sorry for interrupting.

BY MR. DELINSKY:

Q Surveys can provide useful information on an array of subjects that may have nothing to do with estimating the size of an OUD population, correct?

16:16:46 **A** Yes. That's true.

Q Okay. This survey involved the prevalence of diversion, correct?

A Yes.

Q Okay. Other surveys you've conducted in connection

16:16:56 with other articles have involved excess pills after spine

and back surgery, right?

A I believe that's untrue. At least the most important, I believe, and impactful article that I've published in that regard was not a survey that I undertook. It was a meta-analysis of other studies that others have undertaken.

Q Do you recall coauthoring an article called, Opioid Oversupply After Joint and Spine Surgery: A Prospective Cohort Study?

A I do. Thank you. Yes. That's a different study, and I would be happy to review it. But I believe it would be -- it would have been based on claims data or electronic health records.

Q Okay. Dr. Alexander, you've been handed what's been marked as CVS-MDL-4994.

Do you have that?

A Yes, I do.

Q This is an article titled, Opioid Oversupply After Joint and Spine Surgery: A Prospective Cohort Study. Correct?

A Yes.

Q You were one of the authors of this article, correct?

A Yes, I am.

Q Okay. And if you look at the method, it says: In this prospective cohort study at a large inner city tertiary care hospital, we recruited individuals greater than 18

years of age undergoing elective same day or inpatient joint and spine surgery from August to November 2016.

Do you see that language?

A Yes, I do.

16:18:57 **Q** And then it says: Using patient surveys via telephone calls, we assessed patient-reported outcomes.

Do you see that language?

A Yes, I do.

Q So this article that you coauthored did involve the

16:19:05 conduct of a survey, correct?

A Yes, it did.

Q And it involved the conduct of a surgery concerning an opioids issue?

A A survey, yes.

16:19:17 **Q** Okay. Just like the prior article that you coauthored did, correct?

A Yes.

Q So surveys can provide valuable information regarding the use of legal or illegal opioids, correct?

16:19:26 **A** Absolutely.

Q And you didn't conduct one here, correct?

A That's the -- that's true.

Q Okay. In preparing your abatement plan and the redress models that accompany it, you did not talk to a

16:19:45 single person in either county suffering from opioid use

disorder, correct?

A Yes. I think that's true.

Q You did not talk to any doctors in the counties who prescribe medication-assisted treatment, whether it's buprenorphine or other medications?

A That's true.

Q You did not talk to any of the professionals in either county who actually treat patients with opioid use disorder, correct?

A I don't believe that I did.

Q Okay. You did not visit any treatment facilities in the counties, correct?

A No, I did not.

Q You did not visit any residential facilities in the counties?

A I didn't perform a local trip to the counties in order to develop this report. With that said, I was comfortable at the time that I submitted my report, and I remain comfortable and confident, that the -- that I had sufficient information to perform the task that I was requested to fulfill.

Q As you sit here today, you cannot name a single person in either county suffering from opioid use disorder, correct?

A That's true.

Q You have not examined a single person living in either county who suffers from opioid use disorder, correct?

A I mean, I've learned a great deal about opioid use disorder and people's lived experience from many different settings, and I have no reason to believe that it's fundamentally different, you know, in -- that for the -- for what's relevant in order to prepare my report, that the experience is fundamentally different as a function of, you know, living in county one or county two. But I didn't visit the counties or speak individually with individuals with addiction in the counties.

Q And you did not examine any person in either county suffering from opioid use disorder, correct?

A I did not.

Q Okay. You interviewed one person from Lake County in preparing your abatement plan, correct?

A Well, I would characterize it as a discussion rather than an interview, but, yes, I think that is correct.

Q You had a discussion with one person from Lake County in preparing your abatement plan, correct?

A Yes.

Q And that was Ms. Fraser, correct?

A Correct.

Q You interviewed two people from -- I'm sorry.

You had discussions with only two people from Trumbull

County in the course of preparing your abatement plan for Trumbull County, correct?

A Yes. I spoke with April Caraway and Lauren Thorp, both of whom had expansive experience within the county. And I believe I characterized earlier, they were able to cover a large swath of the waterfront that was important to me to speak with them about as I prepared my report.

Q Okay. Now, you provided an abatement plan and an expert report in what we term as Track Two, correct?

A Yes, I did.

Q Track Two concerns Cabell County, West Virginia, and the City of Huntington, West Virginia, that sits within Cabell County, correct?

A Yes.

Q Okay. And in preparing your abatement plan regarding Cabell County and the City of Huntington and Track Two, you interviewed 21 persons from the counties, from -- from Cabell County and the City of Huntington, correct?

A Well, I or members of my team spoke with and had discussions with I believe 21 individuals, yes.

Q Okay. And you understand that Cabell County, West Virginia, has less than one-fourth the population of Lake and Trumbull Counties, correct?

A I would have to think about the numbers, but the right number of people to speak with is a number that gives me

confidence based on all of the other information that I have available to me that my report is sound. And some of the individuals that I spoke with in Cabell were very narrow. They may have been deep, but they were narrow in terms of the scope of the area of -- the scope that they were able to speak to.

16:24:01

So, you know, I speak with varying numbers of people in varying settings, but the goal is always the same, which is to use the information to triangulate what I'm hearing from other sources and to be sure that the approaches that I've taken, the assumptions, the scientific assumptions that I've made, and the insights that I've tried to provide are as scientifically valuable as possible.

16:24:20

Q Okay. So in a case involving a single county composed of roughly 90,000 people, you had discussions with 21 people, yet in a case involving two counties with a combined population of roughly 440,000 people, you -- you had only three discussions, correct?

16:24:40

A Well, I mean, that may be true. You could also point that Cabell has, you know, up to a nine or ten percent rate of OUD, I believe. I mean, it's off -- it's truly off the charts. Not to suggest that they're not serious issues here as well, but, you know, the combined populations of these counties with opioid use disorder is not fourfold that of Cabell County.

16:25:01

16:25:23

So, again, I don't think that -- well, I think I've spoken to the approach that I've used.

Q Okay. So at the end of the day, the problem in Cabell County is more extensive than the problem in Lake and Trumbull Counties, correct?

A All of these counties, I mean, they were not selected as bellwethers by accident. All of these counties are in very, very deep water.

Q Okay. But you only conducted three interviews, had discussions with three people in preparing your abatement plan here?

A I reviewed an extraordinary number of materials, and during the course of that work and all of the other preparatory work, I spoke with these three individuals that -- and I left those conversations feeling comfortable that I had an adequate sense of the situation on the ground in order to submit the materials that I've submitted.

Q Now, in the redress models that you've prepared for Lake and Trumbull Counties, you provide estimates of what you believe is needed for treatment for opioid use disorder, correct?

A Yes.

Q And this -- these estimates come in section 2B of the redress models, right?

A Yes.

Q Okay. Do you have the two redress models in front of you?

A Yes, I do.

Q Okay. I believe that section -- for the benefit of everyone in the courtroom, that section 2B appears on page 15.

And, Dr. Alexander, these are sort of numbered in a legal fashion, but if you look at the number on the far right, that's the number that I'm referring to.

So I'm just going to look at the Lake County one for now, okay?

A Yes.

Q Okay. But as you testified in response to questions from Mr. Lanier, the redress model for Trumbull County takes the same form, correct?

A Yes.

Q Okay. The numbers are different because the population's different and features may be different, but the form is the same, correct?

A Yes. The general structure is the same.

Q Okay. First question: Do you remember Mark, my friend Mark, asking you questions about ASAM, correct?

A Yes, I do.

Q Okay. I just want to clarify the record on this.

ASAM did not supply any of the estimates, the actual

numerical estimates that appear in section 2B, correct?

A That's correct.

Q They provided the categories for which you developed the estimates, correct?

16:28:06 **A** Yes. The four different levels of treatment intensity.

Q Okay. Thank you for the clarification there.

All right. Now, if we look at -- I want to look at line one. Okay? And that line one reflects the total

16:28:25 number of individuals with OUD.

Do you see that?

A Yes, I do.

Q Okay. And line one, in fact, contains your estimates of the total number of individuals with OUD, correct?

16:28:38 **A** Yes. I mean, they're derived from Professor Keyes, but I have used them for my report, and I think that they're appropriate for such use.

Q Okay. So in this line, you provide estimates of the number of persons in each county, depending on the redress

16:28:57 model that we look at, who may be suffering from opioid use disorder in 2022, correct?

A Well, beginning in 2021, but if -- the first column, but, yes, in 2022 as well.

Q Okay. All right. Well, let's go back to it.

16:29:14 You provide estimates for each county of a person

suffering from OUD in 2021, correct?

A Yes.

Q Same for 2022?

A Correct.

16:29:21 **Q** Estimates for 2023?

A Yes.

Q Estimates for '24?

A Yes.

Q Now I'm going to skip. Estimates.

16:29:27 For '28?

A Yes.

Q Estimates for '32?

A Yes.

Q All the way to '35 you have estimates of the number of

16:29:34 persons in each county suffering from opioid use disorder?

A Yes.

Q Okay. So for every year between '21 and '35, you provide an estimate of the number of people that will suffer from opioid use disorder in each county?

16:29:49 **A** Yes.

Q And you -- just -- we've already tread this ground, but you don't know who any of these people are, correct?

A I don't have names if that's what you're asking, correct.

16:30:00 **Q** And you didn't examine any of them, true?

A That's correct.

Q So the persons who underlie these estimates is unknown to you, correct?

A Yes.

16:30:07 **Q** Okay. And as you said, you didn't prepare the estimates, Katherine Keyes did, correct?

A Yes, although I reviewed her methodology and think it's epidemiologically and scientifically sound.

Q Okay. And just so we're all clear on who Dr. Keyes

16:30:25 is, Dr. Keyes is a professor at Columbia, correct?

A Yes.

Q And Professor Keyes is another expert witness engaged by the counties, correct?

A Yes.

16:30:33 **Q** Okay. And now, let's move on with the redress model.

Okay. You then estimate the number of persons who will seek treatment for OUD, correct?

A Well, I estimate a number that should receive treatment, yes.

16:30:55 **Q** Yes. And that's encapsulated by both lines two and three, right?

A Yes.

Q Okay. Line two is the percentage of persons from the OUD population to receive treatment, and line three is the

16:31:10 number of individuals with OUD to receive treatment,

correct?

A Yes.

Q And again, the population of these persons from the OUD population to receive treatment are estimates, correct?

16:31:26 **A** Yes.

Q Okay. So from the pool of persons that Katherine Keyes estimates to suffer from OUD, you then estimate how many of them will obtain treatment, correct?

A Yes. Although, I think the value 2,267 is really

16:31:44 better thought of as a treatment slot. And we discussed this I think a bit earlier.

In other words, I'm not suggesting that there be 2,267 unique people that all get one full year of treatment. I'm suggesting that there be 200 -- I'm sorry, 2,267 treatment

16:32:05 slots in that year.

Q Fair question. I apologize for not making that adjustment based on your testimony.

So from the pool of persons in each county that Dr. Keyes estimates suffer from OUD, you estimate the number

16:32:25 of treatment slots that will be needed to treat the population who will receive treatment, correct?

A Yes. So it's an assessment essentially of population-level treatment capacity.

Q Okay. So what we're seeing here, and it's, of course,

16:32:42 what epidemiologists do, so I don't mean to be pejorative

about it, but in the redress models, we're drawing an estimate from an estimate, correct? The first estimate is the pool of persons suffering from OUD in each county, and the second estimate is the slots that will be used for treatment, correct?

A Yes. Yes.

Q So it's an estimate from an estimate?

A I mean, it's -- you could think of it as a subset of Professor Keyes' estimate. In other words, of the 5,668, a 40 percent subset would be eligible for -- there would be that many treatment slots in year one.

Q But that 40 percent figure is the result of an estimate made by you, correct?

A Well, it's a recommendation because I think if the counties really want to get serious, and -- which is not to suggest they're not serious already, so maybe those are the wrong words. But what I mean is that it's an estimate that I think is achievable but would represent a -- a significant place to begin ramping up treatment over time from the place where both nationally and, based on my feedback that I've received from the counties, the counties are at now.

Q Okay. So for each year in each county you are estimating how many slots will be needed to treat the persons who will obtain treatment, correct?

A Yes.

Q Okay. And just to use Lake County as an example, you estimate — and you began to talk about this — that 41.4 percent of the persons estimated have -- estimated have OUD in Lake County will receive treatment in 2022, correct?

16:34:47 **A** I'm sorry. Where is that statistic that you're looking at?

Q So I'm looking at line two.

A Uh-huh.

Q Right under 2022.

16:34:56 41.4 percent, correct?

A Oh, yes. Yes. Thank you. Yes.

Q Right. So -- so, in Lake County, you estimate 41.4 percent of the persons estimated to have OUD in the county will receive treatment in 2022, correct?

16:35:08 **A** Yes.

Q Okay. In 2024, you estimate 44.3 percent, correct?

A Yes.

Q In 2027, you estimate 48.6 percent, correct?

A Correct.

16:35:18 **Q** And so on.

And you have comparable estimates for Lake County -- Trumbull County, excuse me?

A Correct, ramping up to 60 percent by year 15.

Q Correct.

16:35:29 Then you estimate how many of these persons will

receive medication to treat their addiction, correct?

A Yes.

Q Okay. Now, many people can benefit from medication-assisted treatment when they suffer from OUD, correct?

A Yeah. I mean, it's -- it's safe and effective and can reduce your likelihood of dying by as much as 50 percent, so it's -- it's a pretty good option.

Q Other people may not need medication-assisted treatment to treat their OUD, correct?

A Well, that's true. That's true. But the use of medications has been -- these medicines have been vastly underused, and it's a major opportunity for growth around the country, is to improve and sort of routinize the use of these medications.

Q Okay. So let's go to line -- line four, okay?

Line four is the proportion -- that's probably an epidemiologist word that's above my head. I'll call it the percentage. But it says the proportion of individuals with OUD in treatment to receive MAT, correct?

A Yes.

Q Okay. And then, just by way of example, in Lake County, you estimate that 30 percent of the OUD population will receive MAT in 2021, correct?

A 30 percent of the population in treatment.

Q Thank you. Correct.

And MAT, MAT is medication-assisted treatment, right?

A Yes. Or medications for addiction treatment, which is --

16:37:20 **Q** Okay. And in 2022, you estimate in Lake County that 32.1 percent of the persons suffering from OUD will receive medication-assisted treatment, correct?

A Yeah. I mean, these numbers are -- I mean, these proportions are really perhaps best thought of as targets. 16:37:40 So it -- these are targets and the ultimate reductions that I estimate can be achieved over 15 years are predicated upon the counties' ability to meet these targets over time.

And so, the -- the -- I think the key thing is to emphasize the end points, the bookmarks going from in year 16:38:03 one, 30 percent of people in treatment receiving medication-assisted treatment, up to year 15, where 60 percent of people in treatment will receive medication-assisted treatment.

MR. LANIER: Your Honor, for clarification 16:38:16 sake on the record, I believe this is like that earlier question that you caught that may have been misunderstood or misstated. I want to be sure that the record's clear.

The question was: In 2022, you estimate in Lake County that 32.1 percent of the persons suffering from OUD 16:38:36 will receive medication-assisted treatment, correct?

You said: Yes.

Is that OUD, or did you mean 32.1 percent of those individuals receiving treatment for OUD?

THE WITNESS: It's -- it's -- it's the latter. It's 32.1 percent of the treatment slots occupied where OUD is being treated will include medication-assisted treatment.

MR. LANIER: Thank you. That's not the way that question was asked, and I wanted to make sure the answer was clear.

Thank you.

BY MR. DELINSKY:

Q So going back to your testimony, what we see in lines four and five regarding the population that will receive medication-assisted treatment are targets, correct?

A Yes.

Q They're not even estimates. They're just targets you've put out there that you hope the counties will aspire to achieve and achieve, correct?

A Well, I believe that the -- I believe that these are achievable and meaningful, so they strike a balance between representing over time a significant improvement from where the counties are at now and -- and, yet, I believe that they're achievable and that they can result in a reduction of 50 percent in morbidity and mortality over 15 years, if the plan is implemented.

Q Okay. So let's just -- and by the way, these targets, you provide these targets for the subpopulation that will receive medication-assisted treatment for each year for each county from 2021 through 2035, correct?

16:40:36 **A** Yes. That's true.

Q Okay. And so, let's just take stock of where we are up to this point.

We have an estimate of the population of persons in each county who suffer from OUD that Dr. Keyes prepared, correct?

16:40:54 **A** Yes. That's right.

Q We then have an estimate of the slots needed to treat the persons who will receive treatment in a particular year, correct?

16:41:11 **A** Yes. An estimate of the proportion of all people -- you know, the proportion of treatment slots as a fraction of all people with opioid use disorder within the counties.

Q Okay. And then, below those two estimates, we have targets of the subpopulation who you hope the counties will be able to reach via medication-assisted treatment, correct?

16:41:38 **A** Well, it's not just a hope. I mean, the entire plan is predicated, as we reviewed this morning, on many, many different interventions to improve the access to and uptick of treatment. So, again, I think that these targets are

16:41:58 targets that can be achieved and that can produce

substantial gains for the communities over the 15-year period.

Q Are these targets a form of an estimate?

A I mean, I -- I would consider them as -- as targets, you know, rather than estimates.

Q Okay. So we have an estimate, then an estimate, then a target, correct?

A Correct.

Q Okay. All right. Let's keep going a little bit.

Within the subpopulation of persons who will receive medication-assisted treatment, you then include line items on what kind of medication-assisted treatment they'll receive, correct?

A Yes.

Q Okay. And remember, Judge Polster asked you questions about these lines, right?

A Yes. I mean, my -- I think Judge Polster's question was about how time is managed and how treatment time is managed in this model, and that was what gave me the opportunity to indicate that if you look at input three, when I talk about individuals receiving treatment, that these need not be the same individuals in a given year.

Q Okay. So -- so you have a number -- let's look at line number six, excuse me, okay.

And we're in the Lake County redress model, right?

A Yes.

Q For each year from 2021 to 2035, you provide a number corresponding to the total number of individuals with OUD in treatment to receive buprenorphine in Lake County, correct?

16:44:02 **A** Yes.

Q Okay. Now -- and you include a number for each year, correct?

A Yes.

Q So the number you include for 2021 is 412, right?

16:44:14 **A** Correct.

Q The number for 2028 is 560?

A Correct.

Q And the number for 2035 is 650?

A Yes.

16:44:23 **Q** Okay. Are these numbers estimates or are they targets?

A They're -- they're estimates based on the -- based on what I know about the distribution of treatment across these three types of pharmacologic care.

16:44:43 **Q** Okay. And then you include comparable estimates for each year in Lake County for naltrexone and methadone, correct?

A Yes.

Q And you perform the same kind of estimates for what

16:45:08 kind of MAT will be used for Trumbull County as well,

correct?

A Yes. That's correct.

Q And you do it for each year of your abatement plan, correct?

16:45:15 **A** Yes.

Q From 2021 to 2035, correct?

A Correct.

Q So where we stand now, we have the initial estimate of the number of people suffering from OUD in each county, then

16:45:26 we have an estimate of the slots needed to treat the people who will be in treatment in a particular year, and then below that, we have a target of the number of people who may receive medication-assisted treatment, and then below that target, we have an estimate of what medication that

16:45:50 subpopulation will receive. Correct?

A Yeah. I mean, I would characterize both input two and input four as targets rather than estimates. In other words, the -- the target that 40 percent of the total population receive some type of treatment in that first

16:46:12 year, and then the target that a third of the treatment population receive medication-assisted treatment.

But these numbers are not, of course, just pulled out of a hat, and I provide sources and scientific justifications for why I chose these numbers.

16:46:30 **Q** So we have an estimate, followed by a target, followed

by a target, followed by estimates, correct?

A Yes.

Q Okay. Now, there are other estimates or targets contained in 2B, and I won't go -- we don't have the time or Judge doesn't have the patience, Mark doesn't have the patience to go through them all, okay?

But there's estimates on the number of patients in a particular year or the number of slots in a particular year needed for residential treatment, correct?

A Yes.

Q Needed for inpatient treatment, correct?

A Yes.

Q Needed for outpatient treatment, correct?

A Yes.

Q Are those estimates or are they targets?

A I'd say those are estimates.

Q Okay. And then we have estimates of the number of people who will receive treatment under that assertive community treatment program that you and I talked about, right?

A Yes.

Q We have estimates of the number of teams needed, correct?

A Yes.

Q Estimates or targets, by the way?

A Well, I -- if it's a percent, in this instance, I would consider it a target. So, in other words, input 13 is a target.

Q Understood.

16:48:00 Okay. Okay. Good enough.

And just to be clear, I think we're all on the same page on this, you are -- these estimates or targets, depending on which line we're looking at, are made in your redress models for every year of your abatement plan for

16:48:20 each county, correct?

A Yes. Based on a large body of scientific evidence.

Q Okay. Now, the next thing I want to ask you about we've already touched on in a way that I didn't expect. So this may be a little redundant, but let's go through it,

16:48:43 okay?

Let's go to year one of your plan, okay, and let's go to line two. We're in Lake County.

This line two contains the target subpopulation who you target to receive treatment among the population of OUD

16:49:10 patients, correct?

A Yes. That's true.

Q Okay.

THE COURT: What line are you referring to here?

16:49:15 MR. DELINSKY: Line two, Your Honor, right at

the very top.

THE COURT: Are you on the chart or are you on the report?

MR. DELINSKY: Oh, I'm sorry, Your Honor. I am in the Lake County redress model.

THE COURT: All right.

MR. DELINSKY: I am on page 15, in the bottom right-hand corner.

THE COURT: Okay. 2B. All right. Fine.

MR. DELINSKY: Yes. And now I'm on line two, Your Honor.

THE COURT: All right. Thanks very much.

MR. DELINSKY: Okay. And I'm sorry if I got confusing there.

BY MR. DELINSKY:

Q So, Dr. Alexander, just -- let's just orient Judge Polster again.

Line two contains the target number of individuals to receive treatment for OUD from the OUD population in Lake County, correct?

A Yeah. Or the target number of treatment slots. So essentially, of the 5,668 individuals estimated to have OUD in Lake County in 2021, I suggest a target that 40 percent of -- that essentially that treatment slots be generated for 40 percent of that population.

Q Okay. And that percentage increases as we move through the years, correct?

A It does. It increases significantly. And that's part of what drives the gains that can be recognized in the community.

Q So just -- I'm just picking some years out of the hat for illustration purposes.

If we look at 2024, your target is 44.3 percent, correct?

A Yes.

Q If we look at 2028, your target's 50 percent, correct?

A Yes.

Q And your final target in 2035 is 60 percent, correct?

A Yes.

Q And you provide the same targets in your Trumbull County redress model, right?

A Yes.

Q Okay. Now, I want to go to the notes that Mr. Lanier talked about.

So if we turn the page, okay, are you with me?

A Yes.

Q And we're going to look at note two, because that's what corresponds with line two that we were just looking at, the -- the targets, the targeted slots for persons who will receive treatment from within the OUD population, correct?

A Yes.

Q Okay. Now, you indicate in the notes, and I'm going to highlight this, okay: Based on 2018 Treatment Episode Data Set, TEDS, and 2018 National Survey on Drug Abuse and Health, NSDUH, approximately 20 to 30 percent of individuals with OUD were in treatment at some point in the last 12 months nationally.

Correct?

A Yes.

Q Okay. So your target exceeds the actual rate of treatment, correct?

A Well, based on national estimates, although I'd go on to say that the World Health Organization recommends a minimum target of 40 percent.

Q We're going to -- let's take this sentence by sentence, because what the WHO is talking about is a target, correct?

A Yes.

Q Okay. That's not -- that WHO 40 percent number is not a number of people who actually receive treatment, correct, it's a target?

A I believe that's true.

Q Okay. So the data you put out in your note two indicates that as a -- as an actual matter, the data shows 20 to 30 percent of individuals with OUD were in treatment,

correct?

A Yes.

Q Okay. And if we were to take just year one of your plan, okay, where you target 40 percent, what this would mean is that the data would show that maybe that 40 percent number may be 25 percent too high, right?

A I'm sorry. Can you ask the question again?

Q Okay. If you compare what that TEDS data and the NSDUH data would show, your 40 percent target for 2021 is higher than that data, correct?

A It is higher than that data, although, I think it's a reasonable number to begin with in year one, and it's one that I considered and consulted with the local experts about and one that I think is supported by the totality of evidence that I provide here to support the estimate.

Q Okay. Now, the 40 percent figure you cite, that's what we just talked about, that's the target, right?

A That's a second source. I believe I include three sources here, three different sources of information.

Q For the target, correct?

A Yes.

Q But the data shows the 20 to 30 percent, correct?

A From 2018, from these two datasets, from a national sample, yes, 20 to 30 percent.

Q Okay. Now -- now, I want you to hold onto that data,

that 20 to 30 percent, okay? That dataset is what I'm going to ask you the next questions about, okay? You good?

A Yes.

Q Okay. If that data in the first line were to hold, the number of persons seeking treatment or the number of slots needed for treatment in the communities would be at least 25 percent less than you estimate in year one?

A Are you -- I didn't understand your question.

MR. LANIER: I didn't either.

BY MR. DELINSKY:

Q Let's assume we're at the high end of what the TEDS data and the NSDUH data shows, okay, and that is that 30 percent of the OUD population receives treatment. Okay? Let's assume that.

A Uh-huh.

Q If that's the case, and if that were to hold in Lake County in year one, your target would be 25 percent too high, correct?

A Well, that's a fair number of hypotheticals. So these data are from 2018. They're from national rather than local sources. And they are not reflecting the totality of interventions that I propose as part of this abatement plan.

So they reflect the 2018 standard, which nobody would argue in their right mind is one that we should be proud of or reflect a gold standard.

And so, I think that the 40 percent strikes a reasonable compromise between a number that is higher than this 2018 estimates but one that is achievable. And it's also one that I was -- it's the type of estimate that I also rely on local input as I make, such is the input that I received from Ms. Fraser and Caraway and Thorp.

Q Now, Dr. Alexander, you don't know the percentage of people with OUD in each county that in 2020 or 2021 were in treatment, do you?

A I do not have that precise number.

Q Okay. So you called the TEDS data and the NSDUH data hypothetical. But in the same vein, in fairness, your 40 percent number is hypothetical too, correct?

A Well, I don't -- I didn't mean to suggest that data are hypothetical. What I was suggesting was that there are reasons that these estimates may or may not reflect the situation on the ground in 2021 in Lake or Trumbull Counties.

Q And the 40 percent target that you've set for year one may or may not represent the situation that ultimately comes to pass either, correct?

A That's true. My report contains scientific estimates that are my best professional judgments based on my professional experience and training.

Q And that answer were to apply for each estimate in

this line two for each year in each county, correct?

A Yes. That's true. And in all of these instances, these targets are based on my own professional judgment and scientific experience, which is informed by a wealth of scientific data as well as work with a large team and colleagues and other experts with whom I consult.

Q Okay. Let's go back to the people who will be treated with medication-assisted treatment, okay?

And if we go to the next page --

MR. DELINSKY: So, Your Honor, this is page 17 of the document.

THE COURT: Okay. Thank you.

BY MR. DELINSKY:

Q And Mr. Lanier walked us through some of these items.

Okay. There's costs descriptions here, correct?

A Yes.

Q Okay. And you assume -- and I know this gets complicated, so let's walk through it, because I understand the complication based on your testimony.

So let's go to the words, then we'll flesh out the nuance, okay?

All right. So you say as a cost description in line six, buprenorphine costs per person per month, and then you provide for 12 months, correct?

A Yes.

Q And that's one of the three medication-assisted treatments, correct?

A Yes.

Q So for each slot for buprenorphine treatment, you are allowing for 12 months of treatment?

A Yes. Continuous treatment for whoever's occupying that treatment slot.

Q Okay. And that is the same for methadone?

A Yes.

Q That's the same for naltrexone, correct?

A Yes.

Q Okay. That's the same for every year of your redress model, correct?

A Yes.

Q And that's the same for Lake County as it is for Trumbull County, correct?

A I believe the same methodology's deployed, yes.

Q Okay. So it could be, as Judge Polster I believe pointed out, that some people receive six months of treatment, correct?

A Yes.

Q And that's sufficient, correct?

A Yes. Could be.

Q Now, it could be somebody needs more, longer treatment, longer than a year, correct?

A Yes. Could be six years.

Q It could be a long time.

But regardless of what it is and how it washes out in the laundry, your model allots for 12 months of medication-assisted treatment for each slot each year, correct?

A Yes. Essentially for -- you can think of these essentially as treatment months, and that's correct.

Q Okay. And, by the way, you make the same assumptions for residential treatment, correct?

A Yes.

Q You estimate 12 months of residential treatment per slot, correct?

A Well, yes, although, the treatment duration for residential treatment is often -- it may be one month, it may be three months, it -- it may be less commonly a longer amount of time. But this is a good example where I'm not suggesting that an individual him or herself is in that slot for the full period.

Q But you budget 12 months for each slot for residential treatment, correct?

A Yes.

Q You budget 12 months for each slot for intensive outpatient treatment, correct?

A Yes.

Q You budget 12 months for each slot for inpatient treatment, correct?

A Yes.

Q Okay. You budget 12 months for each slot for outpatient treatment, correct?

17:01:42

A Yes.

Q And that's for every year in your Lake County abatement plan, correct?

A Yes. Although, the number of treatment slots is changing over time.

17:01:56

Q Okay. And that same one-year assumption applies in the same fashion in the Trumbull County redress model, correct?

A Yes.

Q Okay.

17:02:05

MR. DELINSKY: Judge, it's 5:00. What do you want to do?

THE COURT: Well, not so much what I want to do. How much longer do the defendants plan to go? I mean, I was hoping we wouldn't need the doctor to come back tomorrow, but we may. I mean, I -- what you're doing with your cross-examination is up to you.

17:02:27

MR. DELINSKY: Judge --

THE COURT: I was going to say, I understand the thrust of a lot of these questions. Anything I do is

17:02:42

going to be based on estimates, predictions. And I don't plan to give anyone a whole, you know, 15 years worth of money.

My thought is whatever I do, I'll do annually, and I'll require the county executive at the beginning of the year to certify that the county is only going to spend the money for these purposes. And say 90 days at the end -- after the end of the year, they'll certify what they've spent it on.

And if they haven't spent the money because, you know, the estimates proved idealistic or Congress gave them a huge amount of money or whatever, they'll return it. And conversely, if it turns out that the estimates were too low or suddenly there's a huge wave of addiction and it needs an adjustment upward, I'll consider that.

So that's what I'm planning to do, so --

MR. DELINSKY: Judge --

THE COURT: Anyway, in terms of timing, it's up -- you know --

MR. DELINSKY: Judge, that's helpful. I'm done with this form of question.

THE COURT: Okay.

MR. DELINSKY: I don't want to keep you overnight, but just in candor, Judge, I probably have an hour at least.

THE COURT: All right.

MR. DELINSKY: I'm happy to go late. I'm happy to go late.

THE COURT: I'm not. I'm not. At some point, there's diminishing returns because everyone gets tired.

MR. DELINSKY: Okay.

THE COURT: The lawyers get tired, the witness gets tired. Candidly, I'm not 25 anymore.

MR. LANIER: Get out.

THE COURT: We'll just say Mr. Weinberger knows how old I am, and I know how old he is.

MR. WEINBERGER: I'm tired. I'm tired.

THE COURT: So if it's -- if it's a good -- if this is a good as place as any to stop, we can stop. I mean, if you -- if you finished up an area, this is probably as good a place as any.

MR. DELINSKY: This is a convenient spot.

And then, Dr. Alexander, my regrets for the extra night.

THE WITNESS: Oh, I'm here for the courts and the parties, so thank you.

THE COURT: We appreciate that.

MR. DELINSKY: Frank Gallucci has the best recommendations for restaurants that he shared with us, so --

MR. WEINBERGER: So we're starting at 10:00?

THE COURT: Tomorrow we're starting at 10:00 because there was something I need to attend to on Zoom. So we'll start at 10:00 a.m. tomorrow, and we'll pick up with Dr. Alexander.

17:05:15 Okay. Have a good evening, everyone.

MR. LANIER: Will you give us the times tomorrow?

THE COURT: Oh, yeah, I was just going to -- everyone can sit down for a minute. I was going to do that

17:05:24 now.

All right. This is what I had for today. For the plaintiffs, I had 2.75. And for the defense, I have 4.25.

MR. LANIER: Consistent with ours, Your Honor.

THE COURT: Okay. All right. Have a good

17:06:08 evening, everyone. See you tomorrow.

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(Proceedings adjourned at 5:06 p.m.)

C E R T I F I C A T E

I certify that the foregoing is a correct transcript of the record of proceedings in the above-entitled matter prepared from my stenotype notes.

/s/ Sarah E. Nageotte *5/11/2022*

SARAH E. NAGEOTTE, RDR, CRR, CRC DATE